Ref. CDA/BWC/1997/CBM/Add.1

CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION

Annual information exchange of States parties on agreed confidence-building measures

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BELGIUM

(1 July 1997)

J'ai l'honneur de vous transmettre ci-annexé les informations relatives au sujet sous rubrique qui m'ont été communiquées par les autorités belges compétentes. Etant donné que de nombreux services nationaux et/ou dépendant des entités fédérées sont concernés par la communication de ces renseignements, ceux-ci demandent encore à être complétés par des informations à fournir par le Ministère belge de la Défense, que je vous ferai parvenir dès qu'ils seront en ma possession.

Mes autorités tenteront l'année prochaine de vous communiquer les informations requises en remplissant le formulaire publié à cet effet.

Veuillez agréer, Monsieur le Secrétaire général, l'assurance de ma très haute considération.

1°) **Ministère de la Santé publique et de l'Environnement**.

. Concernant les centres de recherche et les laboratoires qui répondent aux normes de sécurité les plus strictes, il n'existe pas en Belgique de laboratoires de confinement à haute sécurité, tels que ceux qui figurent dans le Manuel de Sécurité biologique en laboratoire de l'OMS (1984) (niveau de sécurité biologique BL4 ou P4).

. Concernant l'apparition en 1996 de maladies contagieuses ou autres accidents causés par des toxines, aucun phénomène paraissant dévier de la variation normale des maladies contagieuses n'a été constaté.

. Concernant la Déclaration relative aux installations fabriquant des vaccins pour la protection de l'homme, vous trouverez en annexe la liste de ces installations.

2°) **Ministère de l'Agriculture**.

Vous trouverez en annexe les informations relatives à la peste porcine et aux maladies vésiculeuses

Formule G

- Déclaration des installations de fabrication de vaccins

1. Nom de l'installation : SmithKline Beecham Biologicals

2. Emplacement (adresse postale) : Rue de l'Institut 89
B 1330 Rixensart - Belgique

3. Description générale des types de maladies visés :

Poliomyélite
Tétanos
Diphtérie
Coqueluche
Rougeole
Rubéole
Oreillons
infections à Haemophilus influenzae
Hépatite A
Hépatite B
Varicelle
Grippe
Infections méningococciques

Formule B - i

Informations de base sur les épidémies de maladies infectieuses à notifier

Nombre annuel de cas

Maladie	1992	1993	1994	1995	1996
Peste porcine classique	-	7	48	-	-
Maladie vésiculeuse	1	1	-	-	-

BRAZIL

(18 August 1997)

The Acting Permanent Representative of Brazil to the United Nations presents his compliments to the Secretary-General of the United Nations and has the honor to forward herewith the declaration form containing information for the year 1996 provided by the Brazilian Government as recommended by the Third Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.

The Acting Permanent Representative of Brazil to the United Nations avails himself of this opportunity to renew to the Secretary-General of the United Nations the assurances of his highest consideration.

1. Form "Nothing to Declare" or "Nothing New to Declare"

Confidence Building Measure	Nothing to Declare	Nothing New to Declare
A, Part 1	■	□
A, Part 2 (I)	■	□
A, Part 2 (II)	■	□
A, Part 2 (III)	■	□
B (I)*	□	□
B (II)	□	■
C	□	■
D	□	■
E	□	■
F	■	□
G	□	■

Date: 31 JULY 1997
State Party to the Convention: Brazil

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* See attached Form

Form B (i)

Basic information about infectious disease outbreaks[1]

Disease	Total number of cases	
	1995[2]	1996[3]
Acquired immunodeficiency syndrome	5,706	17,462
Cholera	4,781	883
Dengue	120,487	155,107
Diphtheria	165	181
Hepatitis (all ethiologies)	46,569	32,062
Leishmaniasis, cutaneous	27,357	20,144
Leishmaniasis, Visceral (Calazar)	2,695	3,255
Leprosy	21,316	39,914
Leptospirosis	1,966	5,281
Malaria	555,713	449,092
Measles	3,313	2,637
Meningitis meningococci	3,779	5,301
Meningitis, not specified	9,750	7,287
Meningitis, other ethiologies	16,267	16,969
Meningitis, tuberculosis	231	200
Plague	0	5
Acute flaccid paralysis	384	0
Rabies (human)	29	25
Rubella	624	0
Syphilis (congenital)	132,044[4]	246
Tetanus, accidental	779	815
Tetanus, newborn	86	89
Tuberculosis	33,190	35,200
Typhoid	1,767	1,912
Whooping cough, Pertussis	2,807	1,245
Yellow fever	4	14

[1] According to the Brazilian notification system, the final number of cases is fixed after six months from January 1st of the foollowing notification year.

[2] Final figures.

[3] Preliminary data.

[4] Major change in the notification system.

ESTONIA

(13 June 1997)

The Ministry of Foreign Affairs of the Republic of Estonia present their compliments to the United Nations Department of Disarmament Affairs and, accordingly to the Decision of the Third Review Conference of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, of the agreement to strengthen the implementation and effectiveness of the convention, and to further strengthen its authority through confidence building measures, including data submission, have the honour to inform that the Government of the Republic of Estonia has nothing to declare.

The Ministry of Foreign Affairs of the Republic of Estonia avail themselves of this opportunity to renew to the United Nations Department of Disarmament Affairs the assurances of their highest consideration.

INDIA

(13 August 1997)

The Permanent Mission of India to the United Nations offices in Geneva presents its compliments to the Department of Disarmament Afffairs of the United Nations (Geneva Branch) and has the honour to trasmit the enclosed information on Confidence Building Measures A-G as agreed at the Third Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

The Permanent Mission of India avails itself of this opportunity to renew to the Department of Disarmament Affairs of the United Nations, the assurances of its highest consideration

FORM A, PART 1

EXCHANGE OF DATA ON RESEARCH CENTRES AND LABORATORIES

1. **Name(s) of facility**

The following institutes have been engaged in various research projects for peaceful purposes related to Microbiology, Biochemistry and other related biotechnological fields. These institutes are being funded by various departments of Government of India and under bilateral programmes. There is no funding by Ministry of Defence.

1. Central Jalma Institute for Leprosy (CJIL), Agra, India

2. National AIDS Research Institute (NARI), Pune, India

3. Indian Institute of Science, Bangalore, India

4. Indian Agricultural Research Institute, New Delhi

5. All India Institute of Medical Sciences, New Delhi

None of the institutes have containment facilities of BSL-4 level. Hence in accordance with the modalities agreed at the Third Review Conference of States Parties to the BTWC, our response is: NIL.

EXCHANGE OF DATA ON RESEARCH CENTRES AND LABORATORIES

1. Name(s) of facility

**MICROBIOLOGY AND VIROLOGY DIVISIONS,
DEFENCE RESEARCH AND DEVELOPMENT ESTABLISHMENT,
GWALIOR-474002, INDIA**

2. Responsible public or private organisation or Company

Public Organization under Ministry of Defence.

3. Location and Postal Address

Gwalior, Jhansi Road, Gwalior-474002 (India)

4. Source (s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Department of Defence under Defence R&D Organization (DRDO) financed wholly by DRDO.

5. Number of maximum containment units within the research centre and or laboratory with an indication of their respective size (m2)

None.

6. If no maximum containment unit, indicate highest level of protection.

BSL-2

7. Scope and general description of activities, including type(s) of micro-organisms and or toxins as appropriate.

Research and development on diagnosis for the following organisms:

(i) Salmonella typhi; (ii) Neisseria meningitidis; (iii) Streptococcus pneumoniae; (iv) E. coli; (v) Brucella sps; (vi) Arboviruses; (vii) Dengue virus; (viii) Yersinia sps.; (ix) Adenoviruses; (x) Pseudomonas mallei; (xi) Klebsiella sps.

NATIONAL BIOLOGICAL DEFENCE RESEARCH AND DEVELOPMENT PROGRAMME DECLARATION

1. Is there a national programme to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a programme would include prophylaxis, studies on pathogenecity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

Yes.

If answer to (1) is Yes, complete Form A part 2 (ii) which will provide a description of the programme.

FORM A PART 2 (ii)

DEFENCE RESEARCH AND DEVELOPMENT ESTABLISHMENT, GWALIOR

National Biological Defence Research and Development Programme

II. Description

1. State the objectives and funding of the programme and summarise the principal research and development activities conducted in the programme. Areas to be addressed shall include: prophylaxis, studies on pathogenecity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

The objectives of Biological Defence R&D programme of DRDE are to develop measures for detection and decontamination of pathogenic organisms which are likely to cause threat to our Armed forces.

The purpose of this programme is to initiate research activities on the possible micro-organisms responsible for prevailing human and animal diseases in India and to provide suitable rapid diagnostic methods. The ongoing programme is within the scope of disarmament obligations contained within biological weapon convention.

2. State the total funding for the programme and its source.

The Biological Defence Research and Development programme of D.R.D.E, Gwalior was Rs.2 million, for the fiscal year 1994-95. (April 1st to March 31st)

3. Are aspects of this programme conducted under contract with industry, academic institutions, or in other non-defence facilities?

No.

4. If yes, what proportion of the total funds for the programme is expended in these contracted or other facilities.

Not applicable.

5. Summarise the objectives and research areas of the programme performed by contractors and in other facilities with the funds identified under para 4.

Not applicable.

6. Provide a diagram of the organisational structure of the programme and the reporting relationships (include individual facilities participating in the programme).

Director General, DRDO
!
!
v
Chief Controller, R&D
!
!
v
Technical Director
!
!
v
Director, DRDE
!
!
v
Joint Director (Biology)
!
!
v
Head, Microbiology and Virology

7. Provide a declaration in accordance with Form A part 2 (ii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to the national biological defence research and development programme, within the territory of the reporting State, or under its jurisdiction or control anywhere.

FORM A, PART 2 (ii)

National Biological Defence Research and Development Programme

III. **Facilities**

Complete form for each facility declared in accordance with paragraph 7 in form A part 2 (ii).

In shared facilities, provide the following information for the biological defence research and development portion only.

1. What is the name of facility?
Microbiology and Virology Division
Defence Research and Development Establishment
Gwalior-474002, India.

2. Where is it located (include both address and geographical location)
Jhansi Road, Gwalior-474002, India

3. Floor area of laboratory areas by containment level:
No containment area.
Floor area of the laboratory: 1080 sq. mtrs.

A. The organisational structure of each facility

Director, DRDE

!

!

v

Joint Director (Biology)

!

!

v

Head, Microbiology and Virology

Scientists	14
Technicians	4
Administration and supported staff	7
Service Officers	Nil
	25

For the biological defence research and development element, the number are:

I.	**Total number of Personnel**	25
II.	**Division of Personnel**	
	Civilian	25
	Service Officers	Nil

III. Division of civilian personnel by category:

Scientists	14
Engineers	Nil
Technicians	4
Admin. and supported staff	7

IV. List the scientific disciplines represented in the scientific/ engineering staff

Microbiology, Biochemistry and Virology

V. Are contractor staff working in the facility? If so, provide an approximate number.

None on the programme. Contract staff carry out building and maintenance work.

VI. What is (are) the source of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by the Ministry of Defence?

Ministry of Defence funded through Defence R&D Organization.

VII. What are the funding level for the following programme areas:

Research and Development	**Spent from the budget funds allotted**
Test and Evaluation	**Spent from the budget funds allotted**

VIII. Briefly describe the publication policy of the facility:

All scientists are encouraged to publish in scientific journals.

IX. Provide a list of publically available papers and reports resulting from the work during the previous 12 months. (To conclude authors, titles and full references).

Please see attached annexures to Form A Part 2 (iii).

5. Briefly describe the biological defence work carried out at the facility including type(s) of micro-organisms and/or toxins studies, as well as outdoor studies of biological aerosols.

Research and development on diagnosis for the following organisms:

(i) Salmonella typhi; (ii) Neisseria meningitidis; (iii) Streptococcus pneumoniae; (iv) E. coli; (v) Brucella sps; (vi) Arboviruses; (vii) Dengue virus; (viii) Yersinia sps.; (ix) Adenoviruses; (x) Pseudomonas mallei; (xi) Klebsiella sps.

Form-A, Part-2 (iii)

1. Pandya, C., Tuteja, U. and Jana, A.M. 1994. Relative efficacy of egg albumin comparative efficacy of blocking agents in Dotimmuno binding assay for the detection of group "B" coxsackie viral antigens. Ind. J. Exptl. Biol . 32: 659-661.

2. K. Venkateswaran, R.D. Verma, J.K. Sharma, C.S. Agarwal, 1994. Potency of partially purified malleoproteins for malleins test in the diagnosis of glanders in equines. Vet. Microbiol 41, 391-97.

3. C.P. Rai, C.P. Chandran, S. Phadke, K.M. Belapurkar, K.S. Venkateswaran, 1995. Comparison of sandwich ELISA and latex agglutination test for detection of meningcoccus group A antigen in cerebospinal fluid. Med. Microbiol Lett. 5, 14-21.

Form B (i)

Background information on outbreaks of Reportable Infectious Diseases

HUMANS

Disease	Number of outbreaks* per year			
	1991	1992	1993	1994
Gastroenteritis	9	1	5	2
Cholera	3	--	1	4
Typhoid	1	--	--	--
Malaria	3	--	--	--
Viral Hepatitis	--	2	1	4
Japanese encephalitis	--	1	--	2
Measles	--	1	--	--
Meningo-encephalitis	--	1	--	--
Leishmaniasis	--	--	1	--
Influenza	--	--	1	--
Chicken-pox	--	--	1	2
Plague	--	--	--	1
Others	2	3	--	--
TOTAL	21	11	11	15

* An outbreak of disease is an incidence of cases in excess of that expected for the time, place or the season.

Background information on incidence of reportable infectious diseases in India

ANIMALS

Sl. No.	Name of the Diseases	1991	1992	1993	1994	1995
1	Rinderpest	5556	1903	1614	7609	676
2	Foot and Mouth Disease	162350	203041	53039	135166	24342
3	Haemorrhagic septicaemia	12296	16490	10388	81149	24342
4	Black Quarter	4200	4163	4651	9319	5450
5	Anthrax	1139	1800	1660	2027	2627
6	Sheep and Goat pox	4195	4038	454	2249	1029
7	Blue tongue	20724	1606	8217	42978	4270
8	CBPP	4510	619	3606	5580	2518
9	Swine Fever	1481	2224	2208	2574	5438
10	Ranikhet	92277	73766	377482	103689	168477
11	Fowl pox	49247	31953	16576	37101	22669
12	Marek's disease	122	788	135	1672	4382
13	Pullorum Disease	11436	6095	1451	621	217
14	Salmonellosis	11074	29293	27224	20828	12650
15	Rabies	141	7	0	0	34
16	Sheep pox	--	--	882	1526	2297
17	Goat pox	--	--	137	354	93
18	Tuberculosis	--	--	4	--	74
19	Bursal Disease	--	--	251887	476221	596049
20	PPR	--	--	278	--	4586

Form B (i)

Background information on outbreaks of Major Plant Diseases

Disease	Crop	Number of outbreaks per year					
		1991	1992	1993	1994	1995	1996
RTV	Paddy	1[a,d]	1[c]	--	--	--	--
Sheath blight	Paddy	--	--	--	--	1[a]	--
Canker	Citrus	2[c,b]	--	--	--	--	--
Late blight	Potato	--	1[b,e]	--	--	--	--
White rust	Mustard	--	1[b,e]	--	--	--	--
Quick wilt	Black pepper	--	1[c,e]	--	--	--	--
Rust	Lentil	--	--	1[b,e]	--	--	--
LCV	Cotton	--	--	--	1[c,e]	--	--
Wilt	Gram	--	--	--	1[c,e]	--	--
Scab	Apple	--	--	--	--	--	1[e]
Chikta	Jowar	--	--	--	--	--	1[a]

a = Moderate
b = Moderate-severe
c = Severe
d = Below economic threshold level
e = Above economic threshold level

CONFIDENCE BUILDING MEASURE-C
Encouragement of Publication of Results and Promotion of Use of Knowledge

As a policy, all the Government agencies encourage its scientists to publish results of biological research in scientific journals and promotes use of knowledge gained in the research. The results are published in national and international journals which are easily accessible. The leading Indian and the international journals are covered by the Science Citation Index (SCI) which shows Indian share in world scientific outputs. List of leading Indian journals in the areas of biological sciences is enclosed.

Government agencies also encourage investigators to file patents wherever appropriate. The areas where results are to be patented, the publications are followed only after the patents have been granted.

Normally, the results which are published are of unclassified nature without infringing on national and commercial interest. As regards publication of research on outbreak of diseases, the R&D carried out at research centres and laboratories which is subject to exchange of information, the data on research including information on materials, methods, results, epidemiological and ecological effects, prevention and control measures etc. are published in national and international journals which are easily accessible to the State Parties. Precautions are also taken as regards to handling of biological material as per the standard protocols of safety procedures. Whenever necessary, information on biosafety is sought under mutual cooperation from other States Parties. Review articles are published either in journals or in the form of books which are easily available on request.

Most of the agencies publish their annual reports which give an insight to the scientific research being undertaken through their efforts. These reports are easily available to the State Parties on request. Monthly or bi-monthly bulletins are released by some of the agencies including ICMR which gives detailed information on research activities or facilities relevant to the BW Convention.

LIST OF LEADING INDIAN JOURNALS

Indian Heart Journal.

Indian Journal of Biochemistry and Biophysics.

Indian Journal of Cancer.

Indian Journal of Chest Diseases and Allied Sciences.

Indian Journal of Experimental Biology.

Indian Journal of Gastroenterology

Indian Journal of Leprosy

Indian Journal of Malariology

Indian Journal of Medical Research

Indian Journal of Medical Sciences.

Indian Journal of Ophthalmology.

Indian Journal of Pathology and Microbiology.

Indian Journal of Pediatrics.

Indian Journal of Physiology and Pharmacology,.

Indian Journal of Public Health.

Indian Pediatrics.

Hindustan Antibiotic Bulletin.

Journal of the Association of Physicians of India.

Journal of Communicable Diseases.

Journal of Indian Medical Association.

Journal of Postgraduate Medicine.

National Medical Journal.

Tropical Gastroenterology.

Indian Journal of Biochemistry.

Journal of Scientific and Industrial Research.

Journal of Biosciences.

Journal of Genetics.

Journal of Biological Sciences.

Current Science.

Indian Journal of Environmental Research.

Current Microbiology.

Annals of Applied Biology.

Biology Education.

Annals of Biological Sciences.

Indian Journal of Animal Sciences.

Indian Journal of Poultry Sciences.

Indian Journal of Virology.

Proceedings of Indian National Science Academy.

Indian Journal of Microbiology.

Indian Veterinary Journal.

Journal of Indian Institute of Science.

Journal of Biotechnology.

Plant Disease.

Indian Journal of Plant Biochemistry and Biotechnology.

Indian Journal of Plant Genetic Resources.

Journal of Applied and Environmental Microbiology.

Annals of National Academy of Medical Sciences.

Indian Journal of Sheep Disease and Allergy Sciences.

Journal of Biological Control.

Indian Journal of Comprehensive Microbiology and Immunology.

Journal of Indian Botanical Society.

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CONFIDENCE BUILDING MEASURE-D

Active Promotion of Contacts

Contacts between scientists and other experts engaged in biological research is actively promoted by the Indian agencies. These agencies support international seminars/symposiums/workshops for free access/discussion in the biological fields. Contacts between scientists from different countries are also encouraged through programmes carried out under bilateral and multilateral agreements. The Ministry of Science and Technology already has signed agreements and MOUs with more than forty five countries and most of these agreements include cooperation in the area of biological sciences. The cooperation activities include joint R&D projects in identified areas, exchange of trainees, consultancy visits, joint workshops/seminars/symposiums and exchange of information through publication and computer network. Active promotion of contacts between scientists and other experts engaged in biological research directly related to the convention may have to be considered on case by case under the existing agreements of cooperation between the countries. International conferences/seminars/symposia and similar events agreed under bilateral or multilateral agreements are participated only by the collaborating countries. However, the international meetings/conferences organized by government or other agencies to augment the knowledge of the scientific community as a whole are open for participation by scientists all over the world and for which information is available in leading scientific journals, media or through announcements via internet. Participation is open to all. These are mostly planned events which deliberate on use of biological research for peaceful purposes.

******

CONFIDENCE BUILDING MEASURE-E

Declaration of legislation, regulations and other measures

There are adequate provisions under Indian law for meeting the obligations under the Biological Weapons Convention. Provisions for regulating exports and imports of micro-organisms and toxins as well related equipments exist under the Foreign Trade (Development and Regulation) Act.

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CONFIDENCE BUILDING MEASURE-F

Declaration of Past Activities in Offensive and/or Defensive Biological Research and Development Programmes.

Inputs enclosed at Annexure I.

ANNEXURE-I

CONFIDENCE BUILDING MEASURE-F

Declaration of Past Activities in

Defensive Biological Research and Development Programmes

1973-83

Typhoid (Salmonella typhi)

One of the early work we undertook was a survey of slaughtered animals for S. typhi infection. A modified CIE apparatus was designed for use in typhoid diagnosis. Utilizing specific antibodies and complement, detection procedures for gram negative bacteria were developed.

Dengue Fever

For identification of dengue virus infections, the indirect fluorescent antibody technique was compared with CIE. Further, the role of cell mediated immunity in dengue infections was looked into. A depletion of circulatory lymphocytes was observed. Suppression of immune response to heterologous antigens without affecting humoral and cell mediated immune response to the virus was also observed. Helper T cell and effector T cells involved in delayed hypersensitivity reactions were found suppressed with associated enhancement of suppressor T cell activity.

Glanders

A micro-technique for serological testing of horses was perfected that reduced the sample size and resulted in increased efficiency. A CIE technique was also standardized for rapid diagnosis of glanders.

1984-94

Typhoid (Salmonella typhi)

(i) Antigen detection

Gas chromatographic detection of bacteria was undertaken on blood samples and CIE was standardized for antigen detection. A modified medium was developed for

early detection of the causative agent of typhoid infection in human beings. This medium enhances an early growth of organisms to achieve detection by an agglutination test within 10 hrs of collection of blood sample.

(ii) Antibody detection

Serosurveillance studies were undertaken in domestic animals to search for healthy carriers of the disease. Pigs had high antibody titres when tested by tube agglutination and IHA and were presumed to harbour S. typhi. CIE was found suitable for simultaneous detection of antigens and antibodies in serum samples. Radial plate hemolysis was also used for serodiagnosis of typhoid. Radial counter immunoelectrophoresis and IHA tests were developed for rapid serodiagnosis of typhoid fever. ELISA was also standardized and compared with indirect haemagglutination and indirect fluorescent antibody tests.

Klebsiella sps

Klebsiella detection by gas chromatography was standardized using Klebsiella sps and 32 other bacterial strains. The detection of Klebsiella and E. coli was done in urine samples from patients with clinical symptoms of UTI.

Glanders

Rapid diagnosis of glanders was done in equines by CIE. A Dot-ELISA method was also developed for early detection of glanders in equines with sensitivity comparable to CFT.

Arboviruses:

HI test was performed for Den-2, JE, WN and CHK (arboviruses) in horses for disease detection in equines breeding studs Cell sensitization studies were undertaken for Dengue virus infections. Intrinsic B-cell function was found to be suppressed in dengue infected animals. Mice infected with dengue virus showed suppression of humoral and cell mediated immune responses.

Brucella sps

Field test kit based on Dot-ELISA was developed and evaluated at different centres and compared with serum agglutination test and complement fixation test.

Neisseria meningitidis

Reverse passive haemagglutination and ELISA systems were standardized for the detection of N. meningitidis antigens and antibodies. RPHA was used for detection of infection in humans.

Streptococcus pneumoniae

Standardization of ELISA based methods for the detection of the organism were undertaken.

E. coli

Radioactive and Biotinylated probes were developed for the detection of enterotoxigenic E.coli (ETEC) using plasmid EW 299. Radioactive probes were also used for the detection of enterotoxigenic E. coli by in situ hybridization.

Dengue Fever

Reagent preparation was done for differentiation of the 4 serotypes of dengue viruses.

Yersinia sps

Investigative support provided for the 1994 plague outbreaks in the country.

Adenoviruses

A group specific Hexon antigen was prepared for the diagnosis of Adenoviruses. Latex agglutination and co-agglutination based test kits were also prepared.

.....

Form G

VACCINE PRODUCTION FACILITIES
(ongoing production units)

NAME OF THE FACILITY	VACCINE PRODUCED
Public Sector	
CRI, Kasauli	DPT, DT, JE, Rabies, TT, Yellow Fever
PII, Coonoor	DPT, DT, Rabies, TT
PI, Shillong	DT, TT
HBPCL, Bombay	DPT, DT, OPV, Rabies, TT, Typhoid
BCG Vaccine Lab, Madras	BCG
BIBCOL, Bulandshahr	OPV
VI, Baroda	Cholera, Rabies
KIPM, Madras	Cholera, DT, Rabies, TT, Typhoid
IPM, Hyderabad	Cholera, Rabies, TT, Typhoid
SBI, Patwadanagar	Rabies, TT
BI, Calcutta	Rabies TT
PHI, Bangalore	Rabies
PHL, Trivandrum	Rabies
GVI, Ranchi	Rabies
SVI, Belgaum	Rabies
Private Sector	
SII, Pune	DPT, DT, TT, Measles
BE, Hyderabad	DPT, TT
Radicura Pharma	OPV
Biovaccine Hyderabad	TT

JAPAN

(12 August 1997)

The Permanent Representative of Japan to the United Nations presents his compliments to the Secretary-General of the United Nations and has the honor to submit herewith information regarding the CBM on the Biological Weapons Convention (BWC) for submission to the Third BWC Review Conference, which is to prepare a recommendation on the subject.

The Permaner Representative of Japan to the United Nations avail himself of this opportunity to renew to the Secretary-General of the United Nations the assurances of his highest consideration.

1. **Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange**

Measure	Nothing to declare	Nothing new to declare
A, part 1	☐	☑
A, part 2(i)	☑	☐
A, part 2(ii)	☑	☐
A, part 2(iii)	☑	☐
B(i)	☐	☐
B(ii)	☑	☐
C	☑	☐
D	☑	☐
E	☐	☐
F	☐	☑
G	☐	☐

Date: 15 April 1997

State Party to the Convention: JAPAN

2. CONFIDENCE-BUILDING MEASURE "A"

Form A, Part 1

(1) Exchange of data on research centers and laboratories

1. Name(s) of facility: Murayama Annex of National Institute of Infectious Diseases (former National Institute of Health)

2. Responsible public or private organization or company: Ministry of Health and Welfare

3. Location and postal address: Gakuen 4-7-1, Musashimurayama, Tokyo 208 JAPAN

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence
Ministry of Health and Welfare

5. Number of maximum containment units within the research center and/or laboratory, with an indication of their respective size (m2)
Maximum containment unit contains one(1) P4 laboratory, one(1) P3 laboratory and supporting laboratories, 2270.36 m2 in total

6. If no maximum containment unit, indicate highest level of protection
N.A.

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate
The maximum containment laboratory was established in 1980 for laboratory diagnosis of viral haemorrahegic fever such as Lassa, Marburg and Ebora diseases.
However, the laboratory has not been used as maximum containment laboratory due to the opposition of the neighbours.

Form A, Part 1

(2) Exchange of data on research and laboratories

1.	Name(s) of facility	Tsukuba Life Science Center
2.	Responsible public or private organization or company	The Institute of Physical and Chemical Research (RIKEN)
3.	Location and postal address	Koyadai 3-3-1, Tsukuba-shi Ibaraki-ken 305 JAPAN

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

financed by Science and Technology Agency;
No funding from Defence Agency

5. Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)

2 units, 82m^2 x 2

6. If no maximum containment unit, indicate highest level of protection

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

Risk assessment of recombinant DNA techniques using Escherichia coli, and mouse Retrovirus

Form A, Part 2(i)

National Biological Defence Research and Development Program Declaration

1) Is there a national program to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a program would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

No

If the answer to (1) is Yes, complete Form A: part 2 (ii, which will provide a description of the program.

3. CONFIDENCE-BUILDING MEASURE 'B'

Form B (i)

Background information on outbreaks of reportable infectious diseases

(1) Human diseases

Disease	Number of cases per year					
	1990	1991	1992	1993	1994	1995
Cholera	73	90	48	92	90	306
Dysentery	920	1,120	1,124	1,120	1,042	1062
Typhoid fever	120	106	71	129	71	64
Paratyphoid fever	26	25	29	46	49	75
Scarlet fever	29	22	31	23	6	5
Diphteria	5	2	4	5	1	1
Meningococcal meningitis	12	10	11	7	6	3
Japanese encephalitis	55	14	4	8	6	4
Influenza	25,021	5,868	6,053	16,655	2,404	22,393
Whooping cough	583	536	391	131	145	226
Measles	3,259	5,452	2,250	2,002	1,766	931
Tetanus	47	34	47	33	44	45
Malaria	55	58	51	58	74	66
Tsutsugamushi	941	937	704	712	652	529
Filariasis	0	1	0	1	-	1
Schistosomiasis	5	3	-	-	2	N.A.
Smallpox	0	0	0	-	-	-
Epidemic typhus	0	0	0	-	-	-
Plague	0	0	0	-	-	-
Acute poliomyelitis	0	0	0	3	1	-
Lassa fever	0	0	0	-	-	-
Rabies	0	0	0	-	-	-
Anthrax	0	0	2	-	2	-
Infectious diarrhea	0	0	0	2	1	-

Form B (i)

Background information on outbreaks of reportable infectious diseases

(2) Animal diseases

Disease	Number of cases per year							
	1989	1990	1991	1992	1993	1994	1995	1996
Enzootic Fever	333	0	6	0	0	0	0	0
Epidemic encephalitis	9	3	0	2	0	25	2	12
Anthrax	0	0	1	0	0	0	0	0
Blackleg	7	21	20	12	7	14	11	3
Brucellosis	1	1	1	1	0	0	1	0
Tuberculosis	36	33	35	14	6	11	10	8
Johne's disease	134	184	212	216	226	222	257	298
Piloplasmosis	78	88	92	56	1	0	3	0
Anaplasmosis	7	2	2	0	0	0	0	0
Equine infectious anemia	0	0	0	0	2	0	0	0
Hog cholera	31	0	179	5	0	0	0	0
Swine erysipelas	1,948	1,658	1,993	1,776	1,782	2,087	2,380	1,872
New Castle disease	38,828	0	57,912	0	0	0	0	19
Pullorum disease	2,276	0	0	0	1,219	0	0	0
Foul brood	1,009	1,225	522	415	565	652	661	474
Tetanus	42	45	36	46	44	38	39	58
Infectious bovine rhinotracheitis	372	187	369	715	267	800	858	1,110
Warble infestation	41	16	0	0	0	0	0	4
Equine paratyphoid	12	9	10	0	0	24	14	15
Aujeszky disease	1,575	1,511	639	354	51	91	545	181
Transmissible gastro-enteroptosis	360	5,371	0	75	0	75	750	10,085
Swine dysentery	1,711	735	767	698	188	213	28	206
Infectious bronchitis	47,900	20,099	49,114	1,800	20,132	8,747	62,505	30,261
Infectious laryngotracheitis	1,323	42	1,000	2,080	27,000	4,180	25,216	2,343

Form B (ii)

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern

1.	Time of cognizance of the outbreak	NA
2.	Location and approximate area affected	NA
3.	Type of disease/intoxication	NA
4.	Suspected sources of disease/intoxication	NA
5.	Possible causative agent (s)	NA
6.	Main characteristics of systems	NA
7.	Detailed symptoms, When applicable	
	- respiratory	NA
	- circulatory	NA
	- neurological/behavioural	NA
	- intestinal	NA
	- dermatological	NA
	- nephrological	NA
	- other	NA
8.	Deviation(s) from the normal pattern as regards	NA
	- type	NA
	- development	NA
	- place of occurrence	NA
	- time of occurrence	NA
	- symptoms	NA
	- virulence pattern	NA
	- drug resistance pattern	NA
	- agent(s) difficult to diagnose	NA
	- presence of unusual vectors	NA
	- other	NA
9.	Approximate number of primary cases	NA
10.	Approximate number of total cases	NA
11.	Number of deaths	NA
12.	Development of the outbreak	NA
13.	Measures taken	NA

The Government of Japan wishes to advise that there have been no outbreaks of infectious diseases or similar occurrences caused by toxins, that seem to deviate from the normal pattern as regards type, development, place or time of occurrence.

4. CONFIDENCE-BUILDING MEASURE "C"

Encouragement of publication of results and promotion of use of knowledge

The Government of Japan maintains an open policy on the exchange of information on biological research, the results of such research being made freely available in all cases where the release is not prejudicial to vital national or commercial interests. This policy would apply to any research subject to the reporting in Forms A and B.

Japan

5. CONFIDENCE-BUILDING MEASURE "D"

Form D

Active promotion of contacts

1. Planned international conferences, symposia, seminars, and other similar forums for exchange

For each such event, the following information should be provided:

- name of the conference, ect. NA
- arranging organizations(s), etc. NA
- time NA
- place NA
- main subject(s) for the conference, etc. NA
- conditions for participation NA
- point of contact for further information, registration, etc. NA

2. Information regarding other opportunities

NA

The Government of Japan encourages scientific contacts in the field of basic and applied biological research for peaceful purposes but has no information to provide on planned scientific events or other opportunities for research exchange directly related to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.

Form E

Declaration of legislation, regulations and other measures

Relating to	Legislation	Regulations	Other measures	Amended since last year
(a) Development, production stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I	(YES)/NO	(YES)/NO	(YES)/NO	YES/(NO)
(b) Exports of micro-organisms* and toxins	(YES)/NO	(YES)/NO	YES/(NO)	YES/(NO)
(c) Imports of micro-organisms* and toxins	YES/(NO)	YES/(NO)	YES/(NO)	YES/(NO)

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* Micro-organisms pathogenic to man, animals and plants in accordance with the Convention.

7. CONFIDENCE-BUILDING MEASURE "F"

Form F

Declaration of past activities in offensive and/or defensive biological research and development program

1. Date of entry into force of the Convention for the State Party

   June 8, 1982

2. Past offensive biological R and D program:

   - NONE

3. Past defensive biological R and D programs:

   - NONE

8 CONFIDENCE-BUILDING MEASURE "G" Form G

DECLARATION OF VACCINE PRODUCTION FACILITIES

No	Name of Facility	Location (mailing address)	General description of the types of diseases covered
1	CHIBA SERUM INSTITUTE	2-6-1, KONODAI, ICHIKAWA CITY, CHIBA JAPAN	INFLUENZA, BOTULISM, TETANUS, DIPHTHERIA, JAPANESE ENCEPHALITIS, CHOLERA, HEPATITIS A, MEASLES, MUMPS, RUBELLA, PERTUSSIS
2	DENKA SEIKEN CO., LTD	12-1, KABUTOCHO NIHONBASHI, CHUO-KU TOKYO JAPAN	INFLUENZA, CHOLERA, DIPHTHERIA, TETANUS JAPANESE ENCEPHALITIS PERTUSSIS, WEILS DISEASES, HEPATITIS A
3	THE KITASATO INSTITUTE	5-9-1, SHIROGANE MINATO-KU, TOKYO JAPAN	INFLUENZA, CHOLERA DIPHTHERIA, TETANUS, JAPANESE ENCEPHALITIS PERTUSSIS, MEASLES, MUMPS RUBELLA
4	TAKEDA CHEMICAL INDUSTRIES, LTD	4-1-1, DOSHOMACHI, CHUO-KU, OSAKA CITY JAPAN	DIPHTHERIA, TETANUS, JAPANESE ENCEPHALITIS PERTUSSIS, MEASLES, MUMPS RUBELLA
5	THE RESEARCH FOUNDATION FOR MICROBIAL DISEASES OF OSAKA UNIVERSITY	3-1, YAMADAOKA, SUITA CITY, OSAKA, JAPAN	INFLUENZA, CHOLERA DIPHTHERIA, TETANUS JAPANESE ENCEPHALITIS, PERTUSSIS, MEASLES, MUMPS RUBELLA, VARICELLA
6	THE CHEMO-SERO-THERAPEUTIC RESEARCH INSTITUTE	666, OKUBO, SHIMIZU-CHO KUMAMOTO CITY KUMAMOTO JAPAN	INFLUENZA, RABIES, CHOLERA DIPHTHERIA, TETANUS JAPANESE ENCEPHALITIS HEPATITIS B, PERTUSSIS, MUMPS, RUBELLA, HEPATITIS A
7	SAIKIN KAGAKU INSTITUTE CO., LTD	8-12, HAYAMA-CHO, AOBA-KU, SENDAI CITY MIYAGI JAPAN	JAPANESE ENCEPHALITIS
8	JAPAN BCG LABOLATORY	4-2-6, KOHINATA, BUNKYO-KU, TOKYO JAPAN	TUBERCULOSIS
9	JAPAN POLIOMYELITIS RESEARCH INSTITUTE	5-34-4, KUMEGAWA-CHO, HIGASHIMURAYAMA CITY TOKYO JAPAN	POLIOMYELITIS
10	GREEN CROSS CO., LTD	1-3-3, IMAHASHI, CHUO-KU, OSAKA CITY JAPAN	HEPATITIS B
11	MITSUBISHI CHEMICAL CORPORATION	2-2-24, HIGASHI-SHINAGAWA SHINAGAWA-KU, TOKYO JAPAN	HEPATITIS B

NETHERLANDS

(21 August 1997)

The Permanent Mission of the Kingdom of the Netherlands to the United Nations presents its compliment. to the Centre for Disarmament Affairs and, with reference to the Centre's note CDA/11-96/BW-III, has the honour to present the Netherlands returns over 1996 on Confidence Building Measures in the framework of the Confention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons.

The Permanent Mission of the Kingdom of the Netherlands to the United Nations avails itself of this opportunity to renew to the Centre for Disarmament Affairs the assurances of its highest consideration.

CONFIDENCE BUILDING MEASURES

in the framework of the

CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT,

PRODUCTION AND

STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS

THE NETHERLANDS

1 APRIL 1997

At the Third Review Conference it was agreed that all States Parties present the following declaration:

1. Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange

Measure	Nothing to declare	Nothing new to declare
A, part 1		
A, part 2 (i)		√
A, part 2 (ii)		√
A, part 2 (iii)		
B (i)		
B (ii)		
C		
D		√
E		
F		√
G		

(Please mark the appropriate box(es) for each measure, with a tick).

Date: 1 April 1997
State Party to the Convention: The Netherlands

Form A, part 1

Exchange of data on research centres and laboratories 1/

1. Name(s) of facility 2/ — *Institute for Animal Science and Health (ID-DLO)*

2. Responsible public or private organization or company — *Ministry of Agriculture*

3. Location and postal address — *Houtribweg 39*
P.O. Box 365
8200 AJ Lelystad
and
Edelhertweg 15
P.O. Box 65
8200 AB Lelystad
The Netherlands

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

Ministry of Agriculture and partially financed by industry (contract research). No financing by Ministry of Defence.

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

One high containment, on which WHO P4-level is applicable.
- *Houtribweg: One P4 maximum containment unit comprising 15 laboratories, 2 vaccine-production units, 33 containment stables for animal experiments (pigs, cows, sheep, goats, horses), 4 poultry houses, 36 negative-pressure isolators for poultry, 5 isolators for pigs or calves; 4 containment stables have additional facilities for experiments with genetically modified micro-organisms in large animals (risk-assessment of genetically engineered vaccines); class II laminar flow cabinets.*

6. If no maximum containment unit, indicate highest level of protection

Primary containment: minimum-high
Secondary containment:
- *Edelhertweg: P2-P4. One unit for the diagnosis of rabies and related animal experiments.*

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

Veterinary medicine: mechanisms of pathogenesis; vaccines; host/pathogen relationships; host resistance, diagnosis of foot-and-mouth disease, swine fever and rabies; production of foot-and-mouth disease vaccine, production of Mycobacterium bovis tuberculine; recombinant-DNA technology; genetically engineered vaccines.
Zootechnology: behaviour; stressfysiology and management; animal breeding and genetics; reproduction; nutrition; meat technology.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1. Name(s) of facility 2/ — *National Institute of Public Health and Environmental Protection (RIVM)*

2. Responsible public or private organization or company — *Ministry of Health, Welfare and Sport*

3. Location and postal address — *Antonie van Leeuwenhoeklaan 9*
P.O. Box 1
3720 BA Bilthoven
The Netherlands

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

Ministry of Health, Welfare and Sport. No financing by Ministry of Defence

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

1 Laboratory of 18 m^2

6. If no maximum containment unit, indicate highest level of protection

N.A.

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

Public health purposes: diagnosis of infectious diseases, vaccine development. Recombinant DNA techniques are used for the development of diagnostic reagents and human vaccines. Host / vector systems for Recombinant DNA techniques include E.coli carrying genes from:

- *Bordetella pertussis*
- *Treponema pallidum*
- *Mycobacterium bovis*
- *Streptococcus pneumoniae*

and vaccinia virus carrying genes of HIV-1.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	*TNO Prevention and Health* *Division of Immunological and Infectious Diseases*
2.	Responsible public or private organization or company	*Netherlands Organisation for Applied Scientific Research (TNO)*
3.	Location and postal address	*Zernikedreef 9* *P.O. Box 2215* *2301 CE Leiden* *The Netherlands*

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

   Partly financed by Ministry of Defence and the ministry of Labour

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

   None

6. If no maximum containment unit, indicate highest level of protection

   BL 3 (P3-2)

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

- *Development of rapid detection techniques for biological agents based on antibody recognition and DNA identification*
- *Development of an oral vaccine based on Lactobacillus as vector against inhalation of anthrax*
- *Developmant of passive immunisation protocols and protocols for post-exposure immunisation*
- *Agents studied: Chikungunya virus, Shigella toxin, Tetrodotoxin, Staphylococcus Aureus toxin, Bacillus anthracis, Pseudomonas, Campylobacter*

Form A, part 2 (i)

National biological defence research and development programme Declaration

Is there a national programme to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a programme would include prophylaxis, detection, treatment, toxicology, physical protection, decontamination and other related research.

Yes

If the answer is Yes, complete Form A, part 2 (ii) which will provide a description of the programme.

Form A, part 2 (ii)

National biological defence research and development programme

Description

1. State the objectives and funding of the programme and summarize the principal research and development activities conducted in the programme. Areas to be addressed shall include: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxicology, physical protection, decontamination and other related research.

The objectives of the programme are to provide the Netherlands Armed Forces with adequate expertise and appropriate equipment aimed at protection against hostile use of biological warfare agents. The programme is funded by the Ministry of Defence via the Defence Research Division TNO and supervised by the Director of Military Medical Policy. (TNO is an abbreviation of the Netherlands Organisation for Applied Scientific Research. TNO is a semi-governmental civilian organisation.) Part of the programme is research on, and development of diagnostic techniques, rapid detection, physical protection and decontamination. The other part is collection of information on prophylaxis, toxicology, treatment and related subjects, required for optimal advising of Armed Forces (and the general public) on matters of BW-defence. A standing advisory function relates to the Ministry of Foreign Affairs in respect of arms control and disarmament in connection with the BW Convention.

2 State the total funding for the programme and its source.

The total funding of the programme by the Ministry of Defence is in the order of US $ 500,000 per annum.

3. Are aspects of this programme conducted under contract with industry, academic institutions, or in other non-defence facilities?

No

4. If yes, what proportion of the total funds for the programme is expended in these contracted or other facilities?

N.A.

5. Summarize the objectives and research areas of the programme performed by contractors and in other facilities with the funds identified under paragraph 4.

N.A.

6. Provide a diagram of the organizational structure of the programme and the reporting relationships (include individual facilities participating in the programme).

See diagram 1

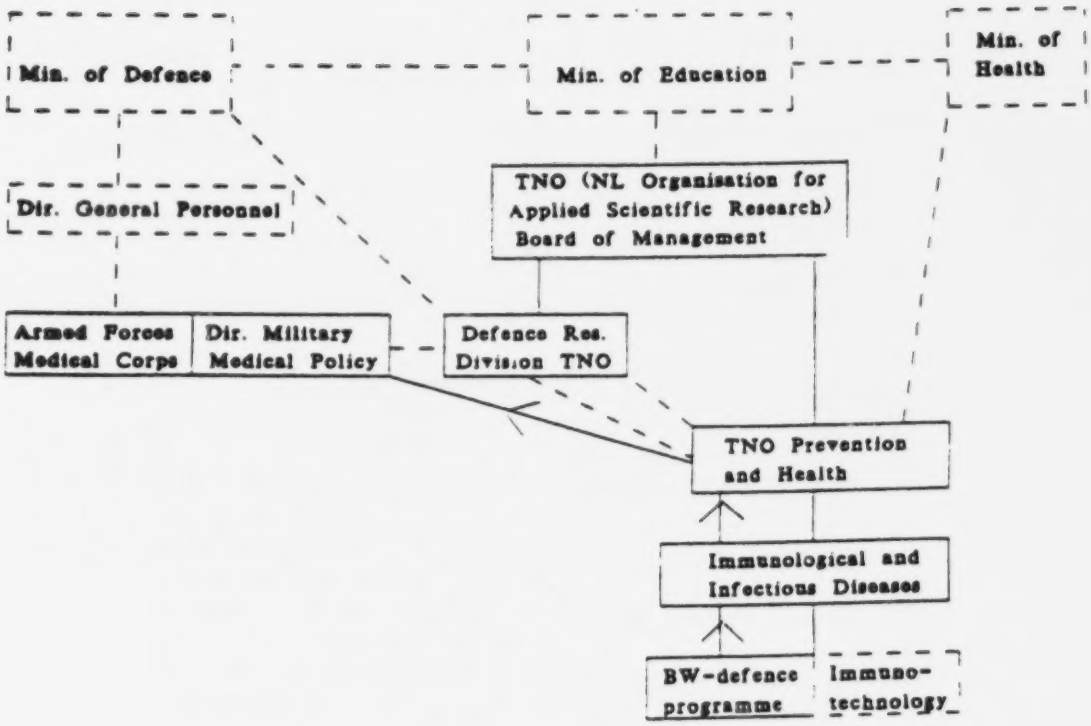
7. Provide a declaration in accordance with Form A, part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to the national biological defence research and development programme, within the territory of the reporting State, or under its jurisdiction or control anywhere.

See Form A, part 2 (iii)

Diagram 1

Diagram of the organizational structure of the Netherlands BW-defence programme.

Full lines: direct responsibility relationships
Dotted lines: indirect and/or funding relationships
Arrows: reporting relationships



Form A, part 2 (iii)

National biological defence research and development programme

Facilities

Complete a form for each facility declared in accordance with paragraph 7 in Form A, part 2 (ii).

In shared facilities, provide the following information for the biological defence research and development portion only.

1. What is the name of the facility?

TNO Prevention and Health
Department of Immunological and Infectious Diseases

2. Where is it located (include both address and geographical location)?

Zernikedreef 5
P.O. Box 2215
2301 CE Leiden
The Netherlands
Located ca 10 km. north of the Hague

3. Floor area of laboratory areas by containment level:

BL2	*96*	(sqM)
BL3	*48*	(sqM)
BL4	_____	(sqM)
Total laboratory floor area	*144*	(sqM)

4. The organizational structure of each facility.

(i) Total number of personnel *7*

(ii) Division of personnel:

Military	*0*
Civilian	*7*

(iii) Division of personnel by category:

Scientists	*3*
Engineers	*0*
Technicians	*3*
Administrative and support staff	*1*

(iv)	List the scientific disciplines represented in the scientific/ engineering staff.	*microbiology, immunology, medical biology, biochemistry*
(v)	Are contractor staff working in the facility? If so, provide an approximate number.	*no*
(vi)	What is (are) the source(s) of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by the Ministry of Defence?	*Ministry of Defence 100%*
(vii)	What are the funding levels for the following programme areas:	
	Research	*70%*
	Development	*20%*
	Test and evaluation	*10%*
(viii)	Briefly describe the publication policy of the facility;	*R&D results to Director of TNO Health and Prevention, and to Ministry of Defence (or Labour). Subjects of general or scientific interest are published in open literature.*
(ix)	Provide a list of publicly-available papers and reports resulting from the work during the previous 12 months. (To include authors, titles and full references).	*Only internal reports*

5. Briefly describe the biological defence work carried out at the facility, including type(s) of micro-organisms * and/or toxins studied, as well as outdoor studies of biological aerosols.

See Form A, Part 1 (page 5) and form A, Part 2 (ii) (page 8)

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* Including viruses and prions.

Form B (i)

Background information on outbreaks of reportable infectious diseases

Human diseases

Human Disease	Number of cases per year						
	1990	1991	1992	1993	1994	1995	1996
Typhoid Fever	63	90	71	54	91	63	43
Lassa Fever and other forms of							
African viral haemorr. fever	-	-	-	-	-	-	-
Plague	-	-	-	-	-	-	-
Acuta	-	-	-	-	-	-	-
Rabies	-	-	-	-	-	-	1[1]
Anthrax	-	-	-	2[2]	-	-	-
Botulism	-	-	-	-	-	-	-
Brucelloses	5	1	4	1	4	3	4
Cholera	3	-	-	2	1	9	3
Diphtheria	-	1	-	-	-	1	-
Dysenteria Bacillaris	416	369	387	385	312	379	326
Febris Recurrens	-	-	-	-	-		-
Yellow Fever	-	-	-	-	-	-	-
Hepatitis A	760	921	823	1078	978	998	735
Hepatitis B	263	264	249	219	213	236	235
Legionella Pneumonia	48	32	21	43	52	42	40
Lepra	10	11	7	18	2	18	7
Leptospiroses	38	40	21	26	18	27	9
Malaria	248	272	180	223	236	313	308
Meningitis cer. Epidemica	267	225	293	268	181	231	235
Meningococco Sepsis	238	218	225	295	241	234	247
Morbilli	16	59	472	468	302	184	57
Ornithosis/Psittacosis	64	54	87	53	50	70	56

	1990	1991	1992	1993	1994	1995	1996
Paratyphoid Fever B	*13*	*18*	*9*	*6*	*8*	*11*	*14*
Poliomyelitis ant.	-	-	*64* [3]	*7* [4]	-	-	-
Pertussis	*399*	*143*	*152*	*264*	*455*	*301*	*2655*
Atypical Pertussis	*72*	*21*	*17*	*30*	*81*	*20*	*123*
Q-fever	*23*	*19*	*26*	*18*	*22*	*27*	*15*
Rubella	*37*	*58*	*9*	*16*	*14*	*21*	*39*
Scabies	*577*	*557*	*817*	*1010*	*1087*	*1244*	*1303*
Tetanus	*2*	*2*	*3*	*2*	*2*	*3*	*1*
Trichinosis	-	-	*3*	-	-	-	-
Tuberculosis	*1390*	*1361*	*1704*	*1589*	*1811*	*1619*	*1570*
Tularaemia	-	-	-	-	-	-	-
Typhus Exanthematicus	-	-	-	-	-	-	-
Foodborne Infection	*1197*	*1054*	*872*	*954*	*969*	*575*	*786*

1. Patient infected in Morocco through a dogbite, and deceased

2. Occupational disease cases; isolated:
- veterinarian (Province of Limburg)
- employer of a slaughtering house (Province of Noord Brabant)

3. Per ultimo 1992

4. Per ultimo 1993

5. This is an estimate, the exact number of cases will be established in the course of 1997

N.B. Numbers of cases in 1995 have been corrected for: Typhoid Fever, Dysenteria Bacillaris, Hepatitis A, Hepatitis B, Malaria, Meningitis cer. Epidemica, Meningococco Sepsis, Pertussis, Atypical Pertussis, Scabies, and Tuberculosis.

Form B (ii)

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern

1. Time of cognizance of the outbreak *1992*

2. Location and approximate area affected *clusters*

3. Type of disease/intoxication *measles*

4. Suspected source of disease/ intoxication -

5. Possible causative agent(s) *Morbilli virus*

6. Main characteristics of systems _____

7. Detailed symptoms, when applicable

   - respiratory _____
   - circulatory _____
   - neurological/behavioural _____
   - intestinal _____
   - dermatological _____

- nephrological _____

- other _____

8. Deviation(s) from the normal patterns as regards

- type *No, typical*

- development *Stabilized*

- place of occurrence *Clustering; mostly children whose parents refused vaccination for religious reasons*

- time of occurrence _____

- symptoms _____

- virulence pattern _____

- drug resistance pattern _____

- agent(s) difficult to diagnose _____

- presence of unusual vectors _____

- other _____

9. Approximate number of primary cases _____

10.	Approximate number of total cases	*468 (1993)* *302 (1994)* *184 (1995)* *57 (1996)*
11.	Number of deaths	*0*
12.	Development of the outbreak	*going on*
13.	Measures taken	*vaccination*

Form B (i)

Background information on outbreaks of reportable infectious diseases

Animal diseases

Number of cases per year

Anima[1] Disease	1989	1990	1991	1992	1993	1994	1995	1996
Foot-and-mouth disease	-	-	-	-	-	-	-	-
Scabies	*21*	*21*	*19*	*9*	*7*	*4*	*4*	*?[1]*
Footrot (sheep)	*118*	*82*	*73*	*39*	*48*	*47*	*35*	*?[1]*
Anthrax (all cattle)	-	-	*1*	-	*1*	-	-	-
Hog cholera	-	*2*	-	*7*	-	-	-	-
Pseud. fowl plague	-	-	*1*	*39*	*22*	*7*	*5*	*2*
Fowl cholera	-	-	-	*1*	-	-	-	-
Atrophic rhinitis	-	-	-	-	-	-	-	*?[1]*
Rabies	-	-	-	-	-	-	-	-
African Swine fever	-	-	-	-	-	-	-	-
African foul brood	*2*	*7*	*1*	-	*1*	*9*	*4*	-
Infectious anaemia	-	-	-	-	-	-	-	-
Rabies (bats)	*22*	*24*	*12*	*8*	*10*	*1*	*3*	*5*
Salmonella enteritidis	-	-	*13*	*24*	*37*	*31*	*39*	*35*
Vesicular swine fever	-	-	-	*6*	-	*3*	-	-

[1] Registration no longer mandatory in the Netherlands

Form B (ii)

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern

1. Time of cognizance of the outbreak — *In 1996 there was no significant deviation from the normal pattern of infectious animal diseases which leads to special information*

2. Location and approximate area affected _____

3. Type of disease/intoxication _____

4. Suspected source of disease/ intoxication _____

5. Possible causative agent(s) _____

6. Main characteristics of systems _____

7. Detailed symptoms, when applicable

   - respiratory _____
   - circulatory _____
   - neurological/behavioural _____
   - intestinal _____
   - dermatological _____
   - nephrological _____
   - other _____

8. Deviation(s) from the normal patterns as regards

   - type _____
   - development _____
   - place of occurrence _____

- time of occurrence _____
- symptoms _____
- virulence pattern _____
- drug resistance pattern _____
- agent(s) difficult to diagnose _____
- presence of unusual vectors _____
- other _____

9. Approximate number of primary cases _____
10. Approximate number of total cases _____
11. Number of deaths _____
12. Development of the outbreak _____
13. Measures taken _____

Form C

Encouragement of publication of results and promotion of use of knowledge

** There are no restrictions whatsoever on the publication of results of scientific research in the Netherlands, there are legal obligations concerning publication. Research institutions may protect commercial proprietary information.*

** An overview of outbreaks of the mentioned infectious diseases (form b(i)) is frequently reported in a bulletin, overviews and inquiries available to the public and to whom it may concern (inter)nationally.*

** Scientific publications can be obtained from relevant (inter)national scientific manuals and magazines.*

Form D

Active promotion of contacts

1. Planned international conferences, symposia, seminars, and other similar forums for exchange

For each such event the following information should be provided:

- name of the conference, etc.	*Regular promotion of contacts takes place in national and international fora such as: EU commission, FAO, OIE (Office Internationales des Epizoo[illegible]) and WHO*
- arranging organization(s), etc.	*N.A.*
- time	*N.A.*
- place	*N.A.*
- main subject for the conference, etc.	*N.A.*
- conditions for participation	*N.A.*
- point of contact for further information, registration, etc.	*N.A.*

2. Information regarding other opportunities

N.A.

Form E

Declaration of legislation, regulations and other measures

Relating to	Legislation	Regulations	Other measures	Amended since last year
(a) Development, production, stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I	YES[1,2]	YES[3,4]	YES[5]	NO
(b) Exports of micro-organisms* and toxins	YES[1,6,8,9]	YES[3,7]	NO	NO
(c) Imports of micro-organisms* and toxins	YES[6]	YES[3]	NO	NO

1 *Uitvoeringswet Verdrag Biologische Wapens (Act BTWC)*

2 *Wet Milieubeheer (Environmental Protection Act)*

3 *Besluit Genetisch Gemodificeerde Organismen (Decree on Genetically Modified Organisms)*

4 *Besluit Biologische Agentia (Decree on Biological Agents)*

5 *Ministeriële regeling ingeperkt gebruik Genetisch Gemodificeerde Organismen (Ministerial Order on the Contained Use of Genetically Modified Organisms)*

6 *Veewet (Cattle Act)*

7 *Uitvoerbesluit Strategische Goederen 1963 (Decree on Export of Strategic Goods 1963), as amended on 20 december 1993. Both animal and plant pathogens are covered in this amendment.*

8 *Verordening (EG) nr. 3381/94 van de Raad van de Europese Unie van 19 december 1994 tot instelling van een communautaire regeling voor exportcontrole op goederen voor tweeërlei gebruik (PbEg L 367). (Council Regulation (European Community) N° 3381/94 of 19 December 1994 setting up a community regime for the control of exports of dual use goods)*

[9] ***Besluit nr. 94/942/GBVB van de Raad van de Europese Unie van 19 december 1994 betreffende het gemeenschappelijk optreden, zoals door de Raad vastgesteld op grond van artikel J.3 van het Verdrag betreffende de Europese Unie, ten aanzien van de controle op de uitvoer uit de Gemeenschap van goederen voor tweeërlei gebruik. (Council Decision N° 94/942/CFSP of 19 December 1994 on the Joint Action adopted by the Council on the basis of article J.3 of the Treaty on European Union on export controls of dual use goods)***

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* Micro-organisms pathogenic to man, animals and plants in accordance with the Convention.

Form F

Declaration of past activities in offensive and/or defensive biological research and development programmes

1. Date of entry into force of the Convention for the State party.

22 June 1981

2. Past offensive biological research and development programmes:

NO

- Period(s) of activities

N.A.

- Summary of the research and development activities indicating wether work was performed concerning production, test and evaluation, weaponization, stockpiling of biological agents, the destruction programme of such agents and weapons, and other related research.

N.A.

3. Past defensive biological research and development programmes:

YES

- Period(s) of activities

From ca 1950 up to now

- Summary of the research and development activities indicating wether or not work was conducted in the following areas:
prophylaxis, studies on pathogenecity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxicology, physical protection, decontamination, and other related research, with location if possible.

The emphasis of the programme was on prophylaxis (medical and physical protection), detection and identification, and on threat assessment in general. The general scope of the programme (as described on form A.2.ii.1) has been fairly constant through the years. Obviously, the rapid developments since around 1950 in medical and molecular biology, as well as in biotechnology, had considerable impact on the programme.

Form G

Declaration of vaccine production facilities

1. Name of facility:

National Institute of Public Health and Environmental Protection (RIVM)

2. Location (mailing address):

P.O. Box 1
3720 BA Bilthoven
The Netherlands

3. General description of the types of diseases covered:

BCG *(production will be ended in the future)*
Diphtheria
Tetanus
Pertussis
Polio
Measles
Mumps
Rubella

Form G

Declaration of vaccine production facilities

1. Name of facility:

Solvay Duphar b.v.

2. Location (mailing address):

CJ van Houtenlaan 36
1381 CP Weesp
The Netherlands

3. General description of the types of diseases covered:

Influenza

REPUBLIC OF KOREA

(6 June 1997)

The Permanent Representative of the Republic of Korea to the United Nations presents his compliments to the Secretary-General of the United Nations and, with reference to the resolution 46/35A entitled "Third Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction" adopted by the General Assembly on 6 December 1991, has the honour to forward the requested information as enclosed.

The Permanent Representative of the Republic of Korea to the United Nations avails himself of this opportunity to renew to the Secretary-General of the United Nations the assurances of his highest consideration.

1. Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange

Measure	Nothing to declare	Nothing new to declare
A. part 1	☐	☒
A. part 2(i)	☒	☐
A. part 2(ii)	☒	☐
A. part 2(iii)	☒	☐
B. (i)	☐	☐
B. (ii)	☒	☐
C	☐	☒
D	☒	☐
E	☐	☒
F	☒	☐
G	☐	☒

(Please mark the appropriate box(es) for each measure, with a tick.)

Date May 31 1997

State Party to the Convention The Republic of Korea

Form A, part 1

Exchange of data on research centers and laboratories ①

1. Name(s) of facility ②

   Korea Research Institute of Bioscience and Biotechnology

2. Responsible public or private organization or company

   Korea Institute of Science and Technology

3. Location and postal address

   P.O.BOX 115, Taedok Science Town, Taejon, Korea

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

   Financial support by Ministry of Science and Technology
   No financial support by Ministry of Defence

5. Number of maximum containment units ③ within the research center and / or laboratory, with an indication of their respective size (m²)

   Zero

6. If no maximum containment unit, indicate highest level of protection

   BL3 (85.8 m²)

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

   Biomedical and Agrochemical research for development of useful therapeutic protein and microbial metabolites
   No research activity with toxins

---

① The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

② For facilities with maximum containment units participating in the national biological defence research and development program, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

③ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 2(i)

National Biological Defence Research and Development Program Declaration

1) Is there a national program to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a program would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

Yes / No

If the answer to (1) is Yes, complete Form A : part 2 (ii) which will provide a description of the program.

Form B(i)

Background information on outbreaks of reportable infectious diseases

Number of cases per year

Disease	1993	1994	1995	1996	1997
Shigellosis	113	223	23	9	
Typhoid fever	307	267	370	475	
Paratyphoid fever	32	8	30	9	
Leptospirosis	4	7	13	6	
Malaria	3	20	107	356	
Murine typhus	11	9	14	3	
Pertussis	39	39	3	7	
Scarlet fever	76	153	141	132	
Meningococcal menigitis	7	5	4	1	
Amebic dysontery	8	2	3	3	
Mumps	474	1,874	430	254	
Hemorrhaegic Fever with Renal Syndrome	109	132	89	118	
Japanese B viral encephalitis	4	3	-	-	
Scrub typhus	-	238	274	263	
Tetanus	3	-	-	-	
Measles	765	7,883	71	65	
Cholera	-	-	68	2	

Form B(ii)

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern

1.	Time of cognizance of the outbreak	Null
2.	Location and approximate area affected	Null
3.	Type of disease/intoxication	Null
4.	Suspected source of disease/intoxication	Null
5.	Possibie causative agent(s)	Null
6.	Main characteristics of systems	Null
7.	Detailed symptoms when applicable	Null

- respiratory
- circulatory
- neurological/behavioural
- intestinal
- dermatological
- nephrological
- other

8.	Deviation(s) from the normal pattern as regards	Null

- type
- development
- place of occurrence
- time of occurrence
- symptoms
- virulence pattern
- drug resistance pattern
- agent(s) difficult to diagnose
- presence of unusual vectors
- other

9.	Approximate number of primary cases	Null
10.	Approximate number of total cases	Null
11.	Number of deaths	Null
12.	Development of the outbreak	Null
13.	Measures taken	Null

Form C

Encouragement of publication of results and promotion of use of knowledge

1. Activities

Any research on the microbial toxin related with BWC has not been done in Korea. Vaccine development against micro-organism pathogenic to men, defined by the Korean Government as the 1st and 2nd class communicable diseases, are being conducted by pharmaceutical companies. And these products are being controlled and inspected by the National Institute of Health, the Republic of Korea.

Information on the pathogenic organisms and methodology for the research and development used in Korea are well-known and publicized through the domestic and the world-leading scientific journal.

Form D

Active promotion of contacts

1. Planned international conferences, symposia, seminars, and other similar fora for exchange

For each such event, the following information should be provided :

- name of the conference, etc. Null
- arranging organization(s), etc. Null
- time Null
- place Null
- main subjects(s) for the conference, etc. Null
- conditions for participation Null
- point of contact for further information, registration, etc. Null

2. Information regarding other opportunities Null

Form B

Declaration of Legislation, Regulations and Other Measures

RELATING TO	LEGISLATION	REGULATIONS	OTHER MEASURES	AMENDED SINCE LAST YEAR
a) Development, production stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I	YES/ NO	YES/ NO	YES/ NO	YES/ NO
b) Exports of micro-organisms* and toxins	YES/ NO	YES /NO	YES/ NO	YES/ NO
c) Imports of micro-organisms* and toxins	YES/ NO	YES/ NO	YES/ NO	YES/ NO

* Micro-organisms pathogenic to man, animals and plants in accordance with the Convention.

Form F

Declaration of past activities in offensive and/or defensive biological research and development program

1. Date of entry into force of the Convention for the State Party

   June 25, 1987

2. Past offensive biological R and D programs :

   - YES - NO
   - Period(s) of activities Null
   - Summary of the R and D activities indicating whether work was performed concerning production, test and evaluation, weaponization, stockpiling of biological agents, the destruction program of such agents and weapons, and other related research. Null

3. Past defensive biological R and D programs :

   - YES - NO
   - Period(s) of activities Null
   - Summary of the R and D activities indicating whether or not work was conducted in the following areas : prophylaxis, studies on pathogenecity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination, and other related research, with location if possible. Null

Form G

Declaration of vaccine production facilities

Names of facility	Mailing Address	Description of the types of diseases covered
Korea Green Cross Corporation	27 KUGAL-RI, KIHEUNG-EUP, YONGIN-KUN, KYEONGGI-DO, 449-900 KOREA	Japanese-B encephalitis, poliomyelitis, cholera, typhoid fever, measles, mumps, hepatitis-B, leptospirosis, tetanus, hemorrhagic fever with renal syndrome
Dong Shin Pharm.	176-3 KOHYUN-RI, JINWI-MYUN, PYUNGTAEK-KUN, KYEONGGI-DO, 130-072 KOREA	diphtheria, pertussis tetanus, poliomyelitis, Japanese-B encephalitis, measles, mumps, rubella hepatitis-B, influenza, leptospirosis
Bo Ryung Biopharma	250-3 CHUKHYUN-RI, MANSEUNG-MYUN, JINCHON-KUN CHUNGBUK-DO, 365-830 KOREA	influenza
Cheil Foods & Chemicals Inc.	511 DUKPYUNG-RI, MAJANG-MYUN, ICHON-KUN, KYEONGGI-DO, 467-810 KOREA	hepatitis-B, measles, mumps, rubella, Japanese-B encephalitis, tetanus, leptospirosis, influenza, typhoid fever
Korea Vaccine	394 MOKNAE-DONG, ANSAN-CITY, KYEONGGI-DO, 425-100 KOREA	poliomyelitis, rubella, measles, diphtheria, pertussis, tetanus, Japanese-B encephalitis, influenza
Dong-A Pharm.	410 SUKSOO-DONG, ANYANG-CITY, KYEONGGI-DO, 430-050 KOREA	Japanese-B encephalitis, influenza
LG Chem.	599 YONGJE-DONG, IKSAN-CITY, CHUNBUK-DO, 570-350 KOREA	hepatitis-B

SAN MARINO

(2 July 1997)

The Secretariat of State for Foreign Affairs of the Republic of San Marino presents its compliments to the Honourable UN Department for Disarmament and, with reference to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons, it has the honour to inform that the Republic has nothing to declare, since it has never produced or stockpiled bacteriological (biological) and toxin weapons, nor can any type of such weapons be found on its territory.

The Secretariat of State for Foreign Affairs of the Republic of San Marino avails itself of this opportunity to renew to the Honourable UN Department for Disarmament the assurances of its highest consideration.

SAUDI ARABIA

(4 June 1997)

الحاقاً لخطابي لمعاليكم برقم UN/SG/121 وتاريخ ١٤١٦/١٢/٧هـ الموافق ١٩٩٦/٤/٢٤م، وإشارة الى خطاب معاليكم رقم CDA/11-96/BW-111 وتاريخ ٢٤ يناير ١٩٩٦م المشار فيه الى قرار الجمعية العامة رقم (46/35A) وتاريخ ٦ ديسمبر ١٩٩١م المعنون "المؤتمر الاستعراضي الثالث للاطراف في اتفاقية حظر استحداث وانتاج وتخزين الاسلحة البكتريولوجية (البيولوجيه) والسمية (التكسينيه) وتدمير تلك الاسلحة " واشارة الى الفقرة العاملة الثالثة من القرار ونصها:

" ٣ - تهيب بجميع الدول الاطراف في الاتفاقية ان تشارك في تنفيذ توصيات المؤتمر الاستعراضي الثالث ، بما في ذلك تبادل المعلومات والبيانات المتفق عليها في الاعلان الختامي للمؤتمر الاستعراضي الثالث ، وان تتيح هذه المعلومات والبيانات للامين العام ، وفقاً للاجراء الموحد ، سنوياً وفي موعد لايتجاوز ١٥ نيسان/ابريل ".

يسرني ان انقل لمعاليكم انه وردني من الجهة المختصة بحكومة المملكة العربية السعودية ما يفيد بعدم حيازتها لأي من هذه الاسلحة ، كما ارفق لمعاليكم بطيه الاستبيان المعبأ والخاص بالمعلومات الاساسية عن انتشار الامراض المعدية التي ورد ذكرها في التقارير بعد أن تم تحديثه بالمعلومات الخاصة بعام ١٩٩٧م والذي يتضح منه عدم وجودها .

النموذج رقم (1)

بطاقات أساسية

عن

إنتشار الأمراض المنبأ التي يود ذكرها في التقارير

نوع المرض	عدد الحالات في السنة				
	١٩٩٣	١٩٩٤	١٩٩٥	١٩٩٦	١٩٩٧
لايوجد	–				
لايوجد		–			
لايوجد			–		
لايوجد				–	
.....	.....	.....	.....	.....	–

Form 3 (i) -

Background information on outbreaks of reportable infectious diseases

Disease	Number of cases per year				
	1993	1994	1995	1996	1997
None	None	None	None	None	None

SLOVENIA

(4 August 1997)

The Permanent Mission of Slovenia to the United Nations presents its compliments to the Centre for Disarmament Affairs and has the honour to transmit, attached hereto, the background information on outbreaks of reportable infectious diseases, pursuant to operative paragraph 3 of the General Assembly resolution 46/35 A.

The Permanent Mission of Slovenia to the United Nations avails itself of this opportunity to renew to the Centre for Disarmament Affairs the assurances of its highest consideration.

Form 8 (i)

Background information on outbreaks of reportable infectious diseases

Disease	Number of cases per year				
	1993	1994	1995	1996	1997
Foodborne disease outbreaks by causative agents:					
Salmonella enteritidis				319	
Cryptosporidium				47	
Hepatitis A viurs				47	
Trichinella				15	
Yersinia enterocolitica				139	
Enterovirus				34	
Staph. aureus				121	
Unknown				474	
Waterborne disease outbreaks - all unknown causative agents				166	
Other disease outbreaks by causative agents:					
Strept. group A				57	
Echovirus				27	
Rotavirus				21	
Sarcoptes scabiei				46	
Unknown				100	

SPAIN

(15 July 1997)

La Misión Permanente de España saluda atentamente al Secretario General de las Naciones Unidas y tiene la honra de transmitirle, de conformidad con lo acordado en la Tercera Conferencia de Revisión de la Convención sobre la Prohibición del desarrollo, la producción y el almacenamiento de armas bacteriológicas (biológicas) y toxínicas y sobre su destrucción, la declaración de España sobre medidas de fomento de la confianza en este ámbito.

La Misión Permanente de España en las Naciones Unidas aprovecha esta ocasión para reiterar al Secretario General de las Naciones Unidas el testimonio de su más alta consideración.

REINO DE ESPAÑA

ANEJO DE LA DECLARACION FINAL SOBRE MEDIDAS DE FOMENTO DE LA CONFIANZA

En la Tercera Conferencia de Exámen se convino en que todos los Estados Partes presentaran la siguiente declaración:

1. Formulario de declaración sobre "nada que declarar" o "nada nuevo que declarar"

Medida	nada que declarar	nada nuevo que declarar
A. Parte 1	X	-
A. Parte 2 i)	X	-
A. Parte 2 ii)	X	-
A. Parte 2 iii)	X	-
B. i)	-	-
B. ii)	-	-
C.	-	-
D	X	-
E	X	
F	-	-
G	X	-

Marquesé el o los casilleros apropiados con respecto a cada medida

Fecha. 15 de abril de 1996

Estado Parte en la Convención:REINO DE ESPAÑA

FORMULARIO A. PARTE 1

Intercambio sobre datos sobre centros y laboratorios de investigación [1]

1. **Nombre de la instalación** [2]: Centro Nacional en Sanidad Animal

2. **Organización o empresa publica o privada responsable:**

   Dirección General de Investigación y Tecnología Agraria y Alimentaria del Ministerio de Agricultura, Pesca y Alimentación.

3. **Ubicación y dirección postal**: 28130 VALDEOLMOS (Madrid)

4. **Fuente(s) de financiación de la actividad, con indicación de si está total o parcialmente financiada por el Ministerio de Defensa.**

   Plan Sectorial de Investigación y Desarrollo Agrario y alimentario del Ministerio de Agricultura, Pesca y alimentación. Programas Nacionales y Programas Comunidad Econçomica Europea. No tiene financiación alguna del Ministerio de Defensa.

5. **Número de unidades de contención máxima** [3] **que hay en el laborgtorio y/o centro de investigación con indicación de su tamaño respectivo (m2).**

   42 laboratorios, 21 animalarios, 1 sala necropsia, Planta trtamientos de resifuos líquidos y sólidos, Area de servicios y plantas técnicas (total 10.800 m2). También existen 60 m2 de laboratorio P4.

6. **Si no existe ninguna unidad de contención máxima, indiquesé el nivel más elevado de protección**

   .....

7. **Alcance y descripción general de las actividades con indicación del tipo o de los tipos de microorganismos y/o toxinas según proceda.**

   Estudio de enfermedades infecciosas de animales preferentemente de origen vírico que no tienen ninguna incidencia importante sobre la salud humana.

---

[1] LAS UNIDADES DE CONTENCION QUE CONSISTEN EN MODULOS DE TRATAMIENTO DE PACIENTES INTEGRADOS A LABORATORIOS DEBEN IDENTIFICARSE POR SEPARADO.

[2] RESPECTO DE LAS INSTALACIONES QUE CONTENGAN UNIDADES DE CONTENCION MAXIMA Y PARTICIPEN EN EL PROGRAMA NACIONAL DE INVESTIGACION Y DESARROLLO PARA LA DEFENSA BIOLOGICA, INDIQUESE EL NOMBRE DE LA INSTALACION Y ANOTESE: "DECLARADA CON ARREGLO AL FORMULARIO A. PARTE 2 III)".

[3] CON ARREGLO AL MANUAL DE BIOSEGURIDAD EN EL LABORATORIO DE LA OMS 1983 O A OTRA NORMA

FORMULARIO A. PARTE 1 (continuación)

1. **Nombre de la instalación:**

Laboratorio Biológico del Departamento de Defensa NBO de la F.N.M.

2. **Organización o empresa pública o provada responsable:**

Ministerio de Defensa

3. **Ubicación y dirección postal:**

Fábrica Nacional La Marañosa
Apartado de Correos 1.105 .- 28080 MADRID

4. **Fuente(s) de financiación de la actividad, con indicación de si está total o parcialmente financiada por el Ministerio de Defensa**

- PETRI
- MINISTERIO DE DEFENSA.
(Programa coincidente)

5. **Número de unidades de contención máxima que hay en el laboratorio y/o centro de investigación con indicación de su tamaño respectivo (m2).**

NINGUNO.

6. **Si no existe ninguna unidad de contención máxima, indiquesé el nivel más elevado de protección.**

NIVEL 2

7. **Alcance y descripción general de las actividades con indicación del tipo o de los tipos de microorganismos y/o toxinas según proceda.**

- Pseudomonas, para biodegradación de TNT (Destrucción de Explosivos, Biorremediación de suelos y tratamiento de aguas)
- Identificación bacteriana para procesos de Biodescontaminación

FORMULARIO PARTE A, PARTE 2 i)

Declaración sobre el programa nacional de investigación y desarrollo para la defensa biológicas

¿ Existe un programa nacional de investigación y desarrollo en materia de defensa biológica en el territorio del Estado Parte o en cualquier parte bajo su jurisdicción o control?. Las actividades de semejante programa comprenderán: profilaxis, estudios de patogenecidad y virulencia, técnicas de diagnóstico, aerobiología, detección, tratamiento toxinología, protección física, descontaminación y otras investigaciones conexas?.

- *En fase exploratoria*:
  - Biodescontaminación (descontaminación)
  - Vacunas (Profilaxis)
- *En fase de desarrollo*:
  - Técnicas de detección.
  - Tratamiento de Toxinología

Si la respuesta es afirmativa, llénese la parte 2 (ii) del formulario A, en la que se pide una descripción del programa.

FORMULARIO A: PARTE 2.ii)

Programa nacional de investigación y desarrollo
en materia de defensa biológica.

Descripción

1. **Señale los objetivos y los recursos financieros de que dispone el programa y resuma las principales actividades de investigación y desarrollo del programa. Se abordarán las siguientes esferas: profilaxis, estudios de patogenecidad y virulencia, técnicas de diagnóstico, aerobiología, detección, tratamiento, toxinología, protección, protección física, descontaminación y otras investigaciones.**

En fase exploratoria:
- Bidescontaminación (es estudio)
- Vacunas (en estudio)

En fase de desarrollo:
- Biodegradación del TNT (eliminación de explosivos, mediante bacterias "Pseudomonas")
- Programa Coincidente : 15.000.000,- Pts.

Financiación:
- Programa EUCLID (UEO): (En fase inicial).

- Técnicas de detección (Técnicas biológicas y químicas, que detecten rápida y sensiblemente un agresivo).

Financiación:
- Programa coincidente: 10.000.000,- Pts.

(Financiación asumida por el Ministerio de Defensa)

2. **Indique el volumen total de recursos de que dispone el programa y sus fuentes,**

- El programa de Biodegradación del TNT, se está desarrollando con la Unión Española de Explosivos (UEE) a través del CSIC (Zaidin-Granada), y la Sección Biológica del Departamento de Defensa NBQ de la Fábrica Nacional de La Marañosa (FNM).

TOTAL ..... 25.000.000.- pTS.

- El programa de Técnicas de Deteción de agresivos, se está desarrollando con el CISA-INICA (Valdeolmos), a través de la empresa Adirondack, S.A. y la Sección Biológica del Departamento de Defensa NBQ de la F.N.M.

TOTAL ..... 20.000.000,- Pts

3. **¿Algunas partes de este programa se desarrollan por contrato con la industria, instituciones académicas o en otras instalaciones no relacionadas con la defensa?.**

SI

4. **En caso afirmativo ¿qué porcentaje del volumen total de recursos financieros del programa se destina a esos contrato u otras instalaciones?.**

Aparte de los recursos del apartado 2, en la investigación de la Sección Biológica del Departamento de Defensa NBQ de la F.N.M, se ha invertido en infraestructura:

Sección Bilógica del Departamento de Defensa NBQ (40% aprox.)

* Proyecto de Biodegradación del TNT
  - Biofermentador
  - Roto-vapor
  - Micropipetas.

* Proyecto de Detección Toxicológica
  - Cabina de alta Seguridad Biológica.
  - Microscopia invertido en fases.
  - Balanzas de precisión
  - Pipetas multicanales
  - Frigoríficos de congelación
  - Centrífuga
  - Autoclaves
  - Material de esterilización

Otros Centros (60% aprox)

5. **Resuma los objetivos y las esferas de investigación del programa de que se ocupen los contratistas y otras instalaciones con los fondos señalados en el párrafo 4.?**

DESCRITO EN EL APARTADO 1.

6. Adjunte un organigrama del programa y sus vínculos en materia de presentación de informes (indique cada una de las instalaciones que participan en el programa).

SE ADJUNTA ORGANIGRAMAS

7. Haga una declaración utilizando la parte 2 iii) del formulario A con respecto a cada istalación, gubernamental o no gubernamental, que dedique una parte sustancial de sus recursos al programa nacional de investigación y desarrollo para la defensa biológica dentro del Estado informante o en otros territorios bajo su jurisdicción y control.

FROMULARIO A: PARTE 2.iii

Programa nacional de investigación y desarrollo para la defensa biológica

Instalaciones

Llene un formulario por cada instalación declarada con arreglo al párrafo 7 de la parte 2.ii) del formulario A.

Respecto de instalaciones compartidas, facilite la siguiente información únicamente con respecto a la parte consagrada a la investigación y el desarrollo en materia de defensa biológica.

1. **Nombre de la instalación**
DEPARTAMENTO DE DEFENSA NBQ DE LA F.N.M. - SECCION BIOLOGICA

2. **Ubicación (dirección y lugar geográfico).**
Fábrica Nacional de La Marañosa. apartado de Correos 1.105
28080 (MADRID).

3. **Superficie de los laboratorios por nivel de contención.**
NIVEL - 2 11 M2
NIVEL - 1 90 m2

Superficie total de laboratorios.

TOTAL - 101 M2

4. **Estructura orgánica de cada instalación.**

I) **Dotación de Personal.**

- Coronel Ingeniero Director.
- Tcol. Ingeniero Jefe del Departamento de Defensa NBQ.
- Comandante Veterinario, Jefe de la Sección de Biología
- Licenciados en:

  - Química - Farmacia
  - Biología - Farmacia
  - Veterinaria.

II) **Distribución del personal**

- Militar 4
- Civil 3

III) Distribución del personal por categorias.

Científicos: Licenciados en: 1 Biología-Farmacia
2 Veterinarios
1. Química-Farmacia

Ingenieros: 1 (Ingeniero de Armamento, Ingeniero Técnico Químico e Ingeniero Industrial Superior).

Técnicos: 1 Auxiliar

Personal Administrativo y de apoyo: 1 Administrativo.

IV) Lista de disciplinas científicas de los científicos e ingenieros.

- 1 Coronel Ingeniero del CIP (Licenciado en Química y Doctor Ingeniero de Armamento)
- 1 Tcol. Ingeniero del CIP (Ingeniero de Armamento, Ingeniero Técnico Químico ngeniero Industrial Superior y Supervisor de Instalaciones Radiactivas)
- 1 Comandante de Sanidad (Veterinario), Doctor en Microbiología
- 1 Capitán de Sanidad (Veterinario)
- 1 Licenciada en Biología y Farmacia.

V) ¿Hay personal en la instalación que trabaje por contrata?. En caso afirmativo, indique el número aproximado.

NO

FORMULARIO B i)

Antecedentes sobre brotes de enfermedades infecciosas de las que se puede informar

ENFERMEDAD	1991	1992	1993	1994	1995	1996*
Aftas	-	-	-	-	1	-
Amigdalitis	-	-	-	1	-	-
Asma	-	-	-	1	-	-
Aspergilosis invasiva	-	-	-	-	1	1
Botulismo	2	8	6	5	5	5
Brucelosis	19	16	13	37	42	26
Carbunco	1	1	1	2	-	-
Cólera	-	1	-	1	-	-
Conjuntivitis	3	2	2	4	2	1
Dermatitis	-	-	-	-	3	1
Dermatomicosis	-	1	5	2	3	-
Disenteria	10	11	2	11	7	2
E. Acc. Al	3	15	6	7	4	-
E. tox. Al	5	18	17	25	26	9
E. tox. Ca	3	2	4	4	-	-
E. tox. Ga	-	3	-	1	6	2
Epiglositis	1	-	-	-	-	-
Erisipela	-	-	-	1	-	-
Eritema	1	1	2	-	2	-
Escabiosis	1	4	4	2	8	7
Escarlatina	-	1	1	-	1	-
Esofagitis	1	-	-	1	-	-
Exantema virico	1	1	-	4	-	-
Faringitis	-	-	-	-	1	1
Faringoamigdalitis	-	-	-	-	2	-

Formulario B i) (continuación)

ENFERMEDAD	1991	1992	1993	1994	1995	1996*
F. exantemática	2	1	-	1	1	-
F. tifoidea	3	6	2	5	3	6
Fiebre Q	1	4	-	4	-	1
Giardiasis	1	1	2	-	-	-
Gingivoamigdalitis	-	-	-	1	-	-
Glositis	-	-	-	-	1	-
Gripe	2	-	2	-	3	1
Hepatitis	58	30	21	30	41	12
Herpes virus	1	-	-	-	-	-
Histeria colectiva	-	-	-	1	1	-
I.R.A.	3	-	1	-	2	-
I. Alimentaria	955	999	985	997	909	318
I. Intestinal	32	38	28	35	94	21
I. Meningocócica	15	12	11	7	9	9
Intox. raticidas	1	-	-	-	-	-
Legionelosis	5	5	9	8	1	4
Lepra	-	-	-	-	1	-
Listeria	-	-	1	-	-	-
Meningitis Linfocitaria	1	17	5	-	8	4
Micobacteriosis	-	-	-	-	-	1
Miositis	-	-	-	-	1	-
Molluscum contagiosum	-	-	-	-	1	1
Mononucleosis	1	1	3	2	1	-
Mucormicosis	-	-	-	-	-	1
Neumonia	2	5	1	2	2	3

Formulario B i) (continuación)

ENFERMEDAD	1991	1992	1993	1994	1995	1996*
Otitis	-	1	1	-	-	-
Parasitosis	-	-	-	-	1	-
Paroditis	6	2	1	-	17	51
Picaduras de pulgas	-	-	-	-	-	1
Pediculosis	3	1	1	1	-	-
Polineuritis	-	-	-	1	-	-
Psitacosis	-	-	2	2	-	-
Pleurodinia	-	1	-	-	-	-
Pseudomonas	-	1	-	-	-	-
Queratoconjuntivitis	-	-	-	-	1	1
Reaccion	-	-	-	-	1	-
Rubeola	9	1	2	1	2	27
Sarampion	27	59	17	10	77	14
Saturnismo	-	-	-	1	1	-
Sifilis	-	-	-	-	1	-
Sindrome febril	-	-	-	-	-	1
Sindrome mano-pie-boca	-	-	-	-	2	-
Sepsis puerperal	1	-	-	-	-	-
Tiña	1	-	1	2	3	-
Tosferina	1	4	2	2	1	1
Toxicomanias	1	-	-	-	-	-
Triquinosis	8	6	5	4	6	3
Tuberculosis	29	21	15	13	78	20
Varicela	2	4	2	2	3	5

* Datos provisionales a 23/06/97

FORMULARIO D)

Promoción activa de los contactos

1. Conferencias, simposios y seminarios internacionales previstos y demás foros análogos de intercambio

En relación con cada uno de tales acontecimientos, se debe proporcionar la información siguiente

- Nombre de la Conferencia, etc: Biodegradacion de materiales energeticos
- Entidades organizadoras, etc: Colegio de Ingenieros de Armamento
- Fecha de celebración
- Lugar de celebracion: Escuela Politecnica Superior del Ejército
- Temas principales de la conferencia: Desmilitarizcion y Medio Ambiente
- Condiciones de participacion: Comunicacion
- Puntos de contacto para más información, inscripcion, etc

2. Información relativa a otras oportunidades

1.
- Nombre de la Conferencia: Aplicación de la Biologia en la Defensa
- Entidad organizadora: Ministerio de Defensa (DISAN)
- Fecha de celebración: 22 de mayo de 1997.
- Lugar de celebración: Centro Militar de Veterinaria (Madrid)
- Tema principal de la Conferencia: Defensa Biologica
- Condiciones de participación: Mesa redonda
- Puntos de contacto, para más información, inscripcion,etc: Centro Militar de Veterinaria (Madrid)

2.
- Nombre de la Conferencia: Biodegradación del TNT
- Entidad organizadora: Ministerio de Defensa (DISAN)
- Fecha celebración: 23 de mayo de 1997
- Lugar de celebracion: Centro Nnal de Veterinaria (Madrid)
- Tema principal de la Conferencia: Defensa Biologica
- Condiciones de participación: Comunicación
- Puntos de contacto para más información, inscripción, etc: Centro Militar de Veterinaria (Madrid)

3.
- Nombre de la Conferencia: Bidescontaminacion
- Entidad organizadora: Ministerio deDefensa (DISAN)
- Fecha celebracion: 23 de mayo de 1997
- Lugar de la celebración: Centro Militar de Veterinaria (Madrid)
- Tema principal de la Conferencia: Defensa Biologica
- Condiciones de participación: Comunicación
- Puntos de contacto para más información, inscripción, etc: Centro Militar de Veterinaria (Madrid)

4.
- Nombre de la Conferencia: Control microbiológico y físico-químico de las aguas en "La Marañosa".
- Entidad organizadora: Ministerio de Defensa (DISAN)
- Fecha celebración: 23 de mayo de 1997
- Lugar celebración: Centro Miliatar de Veterinaria (Madrid)
- Tema principal de la Conferencia: Defensa Biológica
- Condiciones de participación: Comunicación y Poster
- Puntos de contacto para más información, inscripción, etc.: Centro Militar de Veterinaria (Madrid)

5.
- Nombre de la Conferencia: Protección individual y colectiva frente a los aerosoles.
- Entidad organizadora: Ministerio de Defensa (DISAN)
- Fecha celebración: 23 de mayo de 1997
- Lugar celebración: Centro Militar de Veterinaria (Madrid)
- Tema principal de la Conferencia: Defensa Biológica
- Condiciones de participación: Comunicación
- Puntos de contacto para más información, inscripción, etc.: Centro Militar de Veterinaria (Madrid)

6.
- Nombre de la Conferencia: Técnicas de Detección de sustancias peligrosas
- Entidad organizadora: XII Congreso Nacional de Toxicología (Hospital Clínico - Zaragoza).
- Fecha celebración: 17-19 septiembre 1997
- Lugar de celebración: Facultad de Medicina (Zaragoza)
- Tema principal de la Conferencia: Detección Toxicológica
- Condiciones de participación: Comunicación
- Puntos de contacto para más información, inscripción, etc.: Servicio de Toxicología (Hospital Clínico - Zaragoza).

• • •

Best copy available

FORMULARIO E

Declaración de legislación, reglamentos y otras medidas

ASUNTO	LEYES	REGLAMENTOS	OTRAS MEDIDAS	INTROUCCION DE ENMIENDAS DESDE EL AÑO PASADO
A) Desarrollo, producción, adquisición o retención de agenttes microbianos u otros agentes biológicos de las toxinas, armas, el equipo y los vectores especificados en el artículo I.	-	-	-	-
B) Exportación de microorganismos* y toxinas	-	-	-	-
C) Importación de microorganismos* y toxinas	-	-	-	-

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* Microorganismos patogénicos para el hombre, los animales y las plantas, de conformidad con la Convención.

V. 1. Nombre de la instalación: SMITH KLINE FRENCH, S.A.

2. Ubicación (dirección postal): Valle de la Fuenfría, 3
28034 Madrid

3. Descripción general de los tipos de enfermedades que se combaten

Antihepatitis
Antirubeola
Antivaricela
Antipolio

VI. 1. Nombre de la instalación: MERCK SHARP & DOME, S.A.

2. Ubicación: Cra. de Barcelona, Km 32,6
Alcalá de Henares (Madrid)

3. Tipos de enfermedades que se combaten:

Antiparotiditis
Vacuna MSD triple
Antihepatitis

VII. 1. Nombre de la instalación: ALCALA FARMA, S.A,
(ANTES GAYOSO WELLCOME)

2. Ubicación: Cra. M-300, Km 29,920
Alcalá de Henares
28802 Madrid

3. Tipos de enfermedades que se combaten:

Antirubeola
Vacuna trivalente
Antidifteria

VIII. 1. Nombre de la instalación: PEN, S.A.

2. Ubicación: Avda. Marc Deu Montserrat, 215
08026 Barcelona

3. Tipos de enfermedades que se combaten:

Anticatarral

IX. 1. Nombre de la instalación: ORGANON ESPAÑOLA, S.A.

2. Ubicación: C/ Castelló, 1
S. Boi de Llobregat
Barcelona

3. Tipos de enfermedades que se combaten:

Anticatarral.

X. 1. Nombre de la instalación: CISA-INICA (Centro de Alta Seguridad Biológica)

2. Ubicación: VALDEOLMOS 28130-MADRID

3.Descripción general de tipos de enfermedades que se combaten:
Enfermedades relacionadas con agresivos biológicos.

FORMULARIO G

Declaración de instalaciones de producción de vacunas

I. 1. Nombre de la instalación. CBF LETI, S.A.

2. Ubicación (dirección postal): C/ del Sol, 5 (Polígono Ind. Norte)
28760 Tres Cantos (Madrid)

3. Descripción General de los tipos de enfermedades que se combaten:

Antigripal
Antitetánica
Vacunas indiv. de alergia
Gamma globulina normal

II. 1. Nombre de la instalación. IBIS (GRUPO PHARMACIA)

2. Ubicación (dirección postal): C/ Albacete, 5
28027 Madrid

3. Descripción General de los tipos de enfermedades que se conbaten:

Triplevírica

III. 1. Nombre de la instalación. NEZEL, S.A.

2. Ubicación (dirección postal): Av. Diagonal, 507
08029 Barcelona

3. Descripción General de los tipos de enfermedades que se combaten:

Antigripal
Anticatarral

IV. 1. Nombre de la instalación: SANOPHI PHARMA, S.A.

2. Ubicación (dirección postal): C/ Beethoven, 9
08021 Barcelona

3. Descripción general de los tipos de enfermedades que se combaten.

Antigripal

TURKEY

(23 May 1997)

The Permanent Representative of Turkey to the United Nations presents his compliments to the Secretary-General of the United Nations and, with reference to the General Assembly resolution 51/54, entitled "Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction" and according to the Final Declaration of the Third Review Conference of the States Parties to the Convention, has the honor to enclose herewith the annual report of the Government of Turkey.

The Permanent Representative of Turkey to the United Nations avails himself of this opportunity to renew to the Secretary-General of the United Nations the assurances of his highest consideration.

At the Third Review Conference it was agreed that all States Parties present the following declaration

I Declaration from via Nothing to Declare or Nothing New to Declare for use in the information exchange

Measure	Nothing to declare	Nothing new to declare
A part 1	[ ]	[X]
A part 2 (a)	[X]	[ ]
A part 2 (b)	[X]	[ ]
A part 2 (c)	[X]	[ ]
B (a)	[X]	[ ]
B (b)	[X]	[ ]
C	[X]	[ ]
D	[X]	[ ]
E	[X]	[ ]
F	[X]	[ ]
G	[ ]	[X]

(Please mark the appropriate box (es) for each measure, with a tick.)
Date:
State Party to the Convention:

Declaration of vaccine production facilities

1. Name of facility:
   1- Ministry of Health, Ankara, Refik Saydam Hygiene Center
   2- Ministry of Agriculture, Ankara Food and Mouth Dis. Inst
   3- Ministry Agriculture, Ankara - Etlik Veterinary Control and Research Institute.
   4- Ministry Agriculture, Pendik Veterinary Control and Research Institute.
2. Location (mailing address)
3. General description of the types of diseases covered:
   1- Pertussis, Tetani, Diphtheria,
   2- Foot and mouth virus vaccine
   3- Yersinia pestis, Bacillus anthracis vaccine production
   4- Serum production

Form A

Exchange of data on research centers and laboratories 1/

1. Name (s) of facility 2/ Ministry of Health, Ankara, Refik Saydam Hygiene Center

2 Responsible public or private organization or company Public organization

3 Location and postal address Sihhiye/ANKARA P.K.06100

4 Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence Not applicable

5 Number of maximum containment units 3/ within the research center and/or laboratory, with an indication of their respective size(m2) None

6. If no maximum containment unit, indicate highest level of protection
GMP

7 Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate
Collection of bacterial and fungal cultures (Bacillus anthracis, Yersinia pestis, Burkholderia mallei, Francisella tularensis).

UKRAINE

(24 July 1997)

The Permanent Mission of Ukraine to the United Nations presents its compliments to the Secretary-General of the United Nations and referring to the resolution 46/35 A entitled "Third Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction" has the honour to transmit herewith the information and data on the implementation by Ukraine of provisions of the noted Convention in 1996.

The Permanent Mission of Ukraine to the United Nations avails itself of this opportunity to renew to the Secretary-General of the United Nations the assurances of its highest consideration.

1. Объявления по форме: "Объявлять нечего" или "Нет никаких новых изменений, подлежащих объявлению" для использования при обмене информацией

Мера	Объявлять нечего	Нет никаких новых изменений, подлежащих объявлению
A, часть 1	☐	☑
A, часть 2 i)	☑	☐
A, часть 2 ii)	☑	☐
A, часть 2 iii)	☑	☐
B, i)	☐	☐
B, ii)	☑	☐
C	☐	☐
D	☐	☐
E	☐	☐
F	☑	☐
G	☐	☑

(Просьба применительно к каждой мере поставить галочку в соответствующем квадратике (квадратиках))

Дата 15 июля 1997 года

Государство-участник Конвенции УКРАИНА

МЕРЫ УКРЕПЛЕНИЯ ДОВЕРИЯ

2. Мера укрепления доверия "B":

- обмен информацией о вспышках инфекционных заболеваний и аналогичных явлениях, вызванных токсинами.

Информация о вспышках инфекционных заболеваний.

Заболевание	Число случаев в год*				
	1992	1993	1994	1995	1996
Холера **	-	-	845	525	-
Брюшной тиф	68	103	23	77	11
Сальмонеллез	846	325	334	428	236
Дизентерия	226	105	2000	796	1160
Вирусный гепатит А	93	760	1422	716	2638
Дифтерия	1553	2976	3003	5276	3159

Примечание: * указано число заболевших (здесь и в предыдущие годы).

** заболевание холерой в 1996 году не регистрировалось

МЕРЫ УКРЕПЛЕНИЯ ДОВЕРИЯ

3. Мера укрепления доверия "С":

- поощрение публикации результатов и содействие применению знаний.

1. Фильчиков А.А., Стойка Р.С. Апоптоз (физиологическая гибель клетки). Семинары по гемопатологии. Выпуск 2, ВИТУС, Киев, 1996, 24 с.

МЕРЫ УКРЕПЛЕНИЯ ДОВЕРИЯ

5. **Мера укрепления доверия "D":**

- **активное содействие контактам.**

Представители Украины принимали участие в работе:

1. VIII International Congress of Bacteriology and Applied Microbiology Division. International Union of Microbiology Societies. August 18-23, 1996, Jerusalem.

2. VIII International Congress of Micological Division. International Union of Microbiological Societies. August 18-23, 1996, Jerusalem.

На территории Украины в 1996 году проводились:

1. Название конференции:	Украинско-польская конференция по биохимии, посвященная памяти Я.Парнаса.
Организация, проводящая мероприятие:	Национальная академия наук Украины, Львовский Госуниверситет, Академия наук Польши.
Место проведения:	г.Львов.
Время проведения:	9 - 11 сентября 1996 г.
Основная тема конференции:	Теоретическая и прикладная биохимия, физиология человека и животных, методы их преподавания в вузах
2. Название конференции:	23 съезд украинского научного общества микробиологов эпидемиологов и паразитологов им.Д.К.Заболотного.
Организация, проводящая мероприятие:	Национальная академия наук Украины.
Место проведения:	г. Винница.
Время проведения:	9-10 октября 1996 г.
Основная тема конференции:	Теоретическая и прикладная микробиология проблемы паразитологии и лечение инфекционных заболеваний.

3. Название конференции:	11-й национальный конгресс патофизиологов Украины, посвященный М.М. Сиротину.
Организация, проводящая мероприятие:	Национальная академия наук Украины.
Место проведения:	г. Киев.

4. Название конференции:	Лаферон в лечении онкологических и инфекционных заболеваний.
Организация, проводящая мероприятие:	Национальная академия наук Украины
Место проведения:	г. Киев.
Время проведения:	15-16 сентября 1996 г.
Основная тема конференции:	Обсуждение лечения онкологических и инфекционных заболеваний с помощью лаферона.

На Украине планируется провести в 1997 году:

Название конференции:	VI биохимический съезд Украины.
Организация, проводящая мероприятие:	Украинское биохимическое общество.
Место проведения:	г. Киев
Время проведения:	8-12 сентября 1997 г.
Основная тема конференции:	современная теоретическая и прикладная биохимия и физиология человека, животных и растений, клеточная и молекулярная биология.

Форма E

Объявление законодательства, правил и других мер

Предмет	Законодательство	Правила	Другие меры	Поправки, внесенные с прошлого года
a) Разработка, производство, накопление запасов, приобретение или сохранение микробных или других биологических агентов или токсинов, оружия, оборудования и средств доставки, оговоренных в статье 1.	да	да	нет	нет
b) Экспорт микроорганизмов* и токсинов	да	нет	нет	нет
c) Импорт микроорганизмов* и токсинов	да	нет	нет	нет

* Микроорганизмы, являющиеся патогенными для человека, животных и растений в соответствии с Конвенцией.

МЕРЫ УКРЕПЛЕНИЯ ДОВЕРИЯ

6. Мера укрепления доверия "Е":

- объявление законодательства, правил и других мер.

Принят Закон Украины "О присоединении Украины к Будапештскому договору о международном признании депонирования микроорганизмов с целью процедуры патентования" и инструкция к нему.

Кабинетом Министров Украины утверждено Положение про порядок контроля за экспортом, импортом и транзитом товаров, которые могут быть использованы при создании химического, бактериологического (биологического) и токсинного оружия.

Кабинетом Министров Украины принято Постановление "О проведении государственной экспертизы разработки, производства и использования продукции, которая может негативно влиять на здоровье человека."

Кабинетом Министров Украины принято Постановление "Об утверждении Положения о контроле соответствия иммунологических препаратов, которые используются в медицинской практике, требованиям государственных и международных стандартов".

Министерством здравоохранения Украины издан приказ "Об утверждении Положения о государственной санитарно-гигиенической экспертизе проектов нормативной документации в органах, предприятиях и учреждениях государственной санитарно-эпидемиологической службы"

Министерством здравоохранения Украины издан приказ "Об утверждении порядка проведения государственной регистрации иммунобиологических препаратов, которые используются в медицинской практике. Положения о едином государственном регистре иммунобиологических препаратов Украины".

МЕРЫ УКРЕПЛЕНИЯ ДОВЕРИЯ

- мера укрепления доверия "F":

- объявление о прошлой наступательной и/или оборонительной деятельности в рамках программ биологических исследований и разработок.

Правительство Украины не проводило и не проводит никакой наступательной и/или оборонительной деятельности в рамках программ биологических исследований и разработок. Сведениями о такой деятельности бывшего СССР на территории Украины Правительство Украины не располагает.

UNITED KINGDOM

(22 May 1997)

CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKPILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION

Declaration Form: Nothing to Declare or Nothing New To Declare

Measure	Nothing to Declare	Nothing New to Declare
A, Part 1*		
A, Part 2 (i)		X
A, Part 2 (ii)*		
A, Part 2 (iii)*		
B (i)		
B (ii)		X
C		X
D	X	
E		X
F		X
G		

Date: 22 May 1997

State Party to the Convention: United Kingdom of Great Britain and Northern Ireland

* Although there are no significant changes to the UK's 1996 declaration in these categories, a full declaration has been submitted in order to show minor changes.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	Coppetts Wood High Security Infectious Diseases Unit (HSIDU)
2.	Responsible public or private organisation or company	Managed for the Department of Health by Royal Free Hospital NHS Trust
3.	Location and postal address	Coppetts Road Muswell Hill London N10 1JN

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Department of Health

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

The laboratory at Coppetts Wood is classified as Containment Level 3. However, within this, is one laboratory isolator (1M2) which is classified as Containment Level 4 (for patient management tests).

6. If no maximum containment unit, indicate highest level of protection.

N/A

7. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

This is the only comprehensive, high containment patient management laboratory in the UK, responsible for the care of patients with known or suspected Lassa, Ebola, Marburg, Congo and Poxvirus haemorrhagic fevers. All patient management pathology, including haematology, clinical chemistry, bacteriology, parasitology and serology. However, in this laboratory, tests are not performed for diagnosis of Hazard Group 4 pathogens, nor are attempts made to propagate or handle such viruses.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	Virology Department of the Central Veterinary Laboratory
2.	Responsible public or private organisation or company	Ministry of Agriculture, Fisheries and Food
3.	Location and postal address	Central Veterinary Laboratory New Haw Addlestone Surrey KT15 3NB

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Ministry of Agriculture, Fisheries and Food

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

2 laboratories : 6m x 4m; 7m x 4m
1 animal room : 3m x 4m

6. If no maximum containment unit, indicate highest level of protection

N/A

7. Scope and general description of activities, including types(s) of micro-organisms and/or toxins as appropriate

Rabies Diagnosis and Research, covering rabies and rabies related viruses.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility, and mark "Declared in accordance with Form A, part 2 (iii)"

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	National Institute for Biological Standards and Control
2.	Responsible public or private organisation or company	Department of Health
3.	Location and postal address	Blanche Lane South Mimms Potters Bar Herts EN6 3QG

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Department of Health

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

1 pair of units: approximately $50m^2$ for laboratory use, $40m^2$ for other use

6. If no maximum containment unit, indicate highest level of protection

N/A

7. Scope and general description of activities, including types(s) of micro-organisms and/or toxins as appropriate

Standardisation and control of vaccines and associated research. Rabies virus research.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	High Security Infectious Diseases Isolation Unit
2.	Responsible public or private organisation or company	National Health Service
3.	Location and postal address	Newcastle General Hospital Westgate Road Newcastle Upon Tyne NE4 6BE

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Department of Health.

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

One plastic patient isolator (Trexler Isolator) within the patient isolation facility.

6. If no maximum containment unit, indicate highest level of protection

One Category 3 containment laboratory equipped with two Class III/I cabinets situated in the separate Public Health Laboratory specifically for the support of the high containment facility.

7. Scope and general description of activities, including types(s) of micro-organisms and/or toxins as appropriate

Care and diagnosis of patients with suspected viral haemorrhagic fevers.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form V, part 2 (viii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	Virus Reference Division
2.	Responsible public or private organisation or company	Central Public Health Laboratory of the Public Health Laboratory Service
3.	Location and postal address	61 Colindale Avenue London NW9 5HT

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Department of Health and Welsh Office fund this activity as part of their finance of the Public Health Laboratory Service.

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

1 unit : approximately $60m^2$ working area.

6. If no maximum containment unit, indicate highest level of protection

N/A

7. Scope and general description of activities, including types(s) of micro-organisms and/or toxins as appropriate

Diagnosis of infection, particularly of African Haemorrhagic Fevers. Development of improved diagnostic reagents.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A, part 1

Exchange of data on research centres and laboratories 1/

1.	Name(s) of facility 2/	Centre for Applied Microbiology and Research (CAMR)
2.	Responsible public or private organisation or company	Microbiological Research Authority
3.	Location and postal address	Porton Down Salisbury Wiltshire SP4 0JG

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence.

Department of Health funds this activity as part of its finance of the Microbiological Research Authority's Centre for Applied Microbiology and Research

5. Number of maximum containment units 3/ within the research centre and/or laboratory, with an indication of their respective size (m^2)

3 units : $62m^2$; $55m^2$; $50m^2$.

6. If no maximum containment unit, indicate highest level of protection

N/A

7. Scope and general description of activities, including types(s) of micro-organisms and/or toxins as appropriate

Diagnosis of and research into various P4 viruses, including Lassa, Ebola, Marburg and Congo.

1/ The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

2/ For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

3/ In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent.

Form A Part 1

EXCHANGE OF DATA ON RESEARCH CENTRES AND LABORATORIES[1]

1.	**Names(s) of facility[2]**	With effect from April 1st 1997: Defence Evaluation and Research Agency, Chemical and Biological Defence, Porton Down: Declared in accordance with Form A, Part 2(iii). NB. This facility formerly operated as: Chemical and Biological Defence Establishment Porton Down prior to April 1st 1996; then as Chemical and Biological Defence, Protection and Life Sciences Division, Porton Down until March 31st 1997
2.	**Responsible public or private organisation of company**	Ministry of Defence
3.	**Location and postal address**	Chemical and Biological Defence Porton Down Salisbury Wiltshire SP4 0JQ NB. From April 1st 1996 to April 1st 1997 the postal address was PLSD, Porton Down, Salisbury Wiltshire, SP4 OJQ

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**

   Largely financed by MOD.

5. **Number of maximum containment units[3] within the research centre and/or laboratory, with an indication of their respective size (m^2)**

   No BL4 facility.

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1 The containment units which are based patient treatment modules, integrated with laboratories, should be identified separately.

2 For facilities with maximum containment units participating in the national biological defence research and development program please fill in name of facility and mark "Declared in accordance with Form A. Part 2(iii)"

3 In accordance with the WHO Laboratory Biosafety Manual, or equivalent.

6. **If no maximum containment unit, indicate highest level of protection**

The highest level of protection is BL3.

7. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**

Research and development into protective measures as defence against the hostile use of toxins and micro-organisms.

Form A, Part 2 (i)

NATIONAL BIOLOGICAL DEFENCE RESEARCH AND DEVELOPMENT PROGRAM DECLARATION

1. **Is there is a national programme to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a program would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.**

Yes

If the answer to (1) is Yes, complete Form A, Part 2 (ii) which will provide a description of the program.

Form A, Part 2 (ii)

NATIONAL BIOLOGICAL DEFENCE RESEARCH AND DEVELOPMENT PROGRAM

II. Description

1. **State the objectives and funding of the program and summarise the principal research and development activities conducted in the program. Areas to be addressed shall include: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.**

The objectives of the UK national biological defence research and development programme which is funded by the Ministry of Defence are:

a. To assess the hazard to the UK Armed Forces from biological and toxin warfare (BTW) agents which might be used by an aggressor against them.

b. To establish effective means and procedures for the detection, warning, identification, diagnosis and monitoring of BTW agents.

c. To provide protective measures to defend the UK Armed Forces against BTW agents.

d. To provide medical countermeasures for prophylaxis, therapy, and treatment against BTW agents.

The scope of the programme is to provide effective protective measures to a range of biological and toxin agents which may be used aggressively in times of conflict.

The maintenance of effective protective measures is seen as complementary to the disarmament obligations contained within the Convention. Effective protective measures diminish the military utility of biological weapons (BW) to the potential aggressor.

The principal areas of work are as follows:

Hazard Assessment

The assessment of the potential hazard to the UK Armed Forces requires the evaluation of the range of potential biological and toxin agents which might be utilised by a potential aggressor. Such studies necessarily involve activities such as consideration of the agents, their potency, their aerobiology and the way in which they might be utilised by an aggressor in military scenarios. Such work is essential to determine the challenge levels against which detectors and protective equipment must be effective. Current work has included the inhalation toxicology of ricin and the toxicology of *Clostridium perfringens* and a series of bioregulatory peptides.

Detection

Provision of an efficient and rapid detection of the presence of a BTW challenge is of the highest importance in assuring that appropriate postures are achieved without military personnel having continuously to wear individual protection. Current work includes the detection of particulate aerosol clouds containing BTW agents using a range of

complementary detection technologies; non-specific (to detect particulate material), generic (to distinguish between biological and non-biological materials) and specific (to identify the material).

The application of laser light scattering techniques is also used to interrogate aerosol particles as a method to detect the physical presence of BTW agents. The results of the research in this area have enabled CBD Porton Down to develop and patent a novel aerosol particle detector. This system is being marketed commercially in the UK.

Techniques utilising antibody and gene probe technologies are also being employed and show the value of molecular biology and biotechnology to BTW defence. The first, applicable both to toxins and living organisms makes use of binding of specific antibodies, either mono- and polyclonal, to potential BTW agents. The binding of the BTW agent to a, generally immobilised, antibody can be monitored either through a linked colour change (eg Dipsticks) or electronically (biosensors). Gene probes are applicable to many native or genetically manipulated infectious BTW agents like bacteria and viruses. Their effect is dependent upon the binding of homologous strands of DNA. Work is continuing in order to accelerate and simplify the methodology thus rendering it suitable for military use. Recent work at Porton Down has demonstrated the efficacy of gene probes in detecting low levels of *Francisella tularensis* in infected clinical samples, extended the range of gene probes for Flaviviruses, and evaluated the effect of microbial strain variation on gene probe assays.

The Integrated Biological Detection System (IBDS) is due to enter the PD2 phase shortly.

Protection

Effective individual and collective protection requires the physical separation of challenged service personnel from BTW agents which are likely to take the form of particulate aerosols. Individuals are protected against this challenge primarily by a respirator and suit which have been designed and developed from research carried out at Porton Down. Recent research has pointed the way to providing suits with excellent levels of protection but reduced physiological loading compared with in-service suits. As new threats emerge the continued effectiveness of individual protection is monitored by laboratory testing and evaluation of potential hazards. Collective protection (colpro) systems, whereby whole buildings, rooms, ships or vehicles are isolated from BW agent challenge, requiring the minimum of maintenance are also being developed at Porton Down. The Porton Down range provides facilities for testing the effectiveness of larger protective equipment's against simulated challenge.

Medical Countermeasures

The medical countermeasures programme, which is a key part of the BW defence programme, seeks to determine the efficacy of vaccines, antibiotics and antimicrobials for the prevention and treatment of diseases caused by BW agents. Cytokine therapy is also being explored to augment the immune and non-specific systems that are activated early on in the course of an infection. In this study the response is being characterised to Venezuelan Equine Encephalitis (VEE), tularemia and plague. Work is also continuing on the evaluation of commercially available and novel antibiotics as immediate therapy for exposure to BW agents. These compounds are being investigated using *in vivo* and *in vitro* models. Ideal BW vaccines would be administered orally and would protect against an aerosol challenge from a number of different agents. At Porton Down orally delivered multivalent viral vaccine is being developed against a range of pathogens. Vaccine production against anthrax, plague, botulinum toxin, tularemia, VEE and glanders is continuing. A cheap, high level expression system for the

production of the protective component of the anthrax vaccine, the protective antigen (PA), has been developed. Studies have shown immunisation with PA protects animals against an aerosol challenge of the agent. The plague subunits F1 and V, given as a combination vaccine have also been produced as recombinant proteins in engineered *Escherichia coli*. This year the second generation vaccine for plague has been derived and offers protection against a wide range of virulent strains of *Yersinia pestis*. Recombinant organisms containing the botulinum type FH_c and hybrid Tet-FH_c have been constructed and cloned. The protective immune responses to tularemia have been investigated and those essential for protection have been identified. A vaccine to stimulate this component of the immune system is under way. The ability of a vaccine to protect against 5 serotypes of VEE (1a, 1c, 1e, II and III) and *Burkholderia mallei* strains have been tested in several animal models. Work has also begun to identify virulence genes/products from *Burkholderia mallei* to form the basis of a future sub-unit vaccine. Work on a vaccine for ricin toxin has been completed and has shown that vaccination using liposomal formulations of the toxoid or ricin A chain give good protection against toxin induced lung damage.

The potential of DNA vaccination technology is also currently being explored. The objective of this work is to encourage the host cells to express the vaccinated DNA which codes for viral proteins. These would then be exported, antibodies raised against them and which would offer protection against exposure to the BW agent. Projects have also continued with a view towards developing improved animal models for disease or replacing animal models with tissue culture assays to measure toxicity, infectivity or protective responses against disease.

Arms Control

CBD provides technical advice on CBW non-proliferation to the Ministry of Defence and the Foreign and Commonwealth Office as well as other Government Departments involved in formulating and implementing UK policy on non-proliferation matters. This has included working towards and participating in the Review Conferences of the BTWC, the Ad Hoc Group of Governmental experts tasked with identifying and examining potential verification measures, the Special Conference of States Parties held in September 1994, and the new Ad Hoc Group. CBD has also assisted in collating data for the UK Confidence Building Measure returns. CBD staff have assisted in formulating and executing policy on export control legislation covering items related to biological weapons proliferation in foreign countries. Since 1991, CBD has provided specialist advice and personnel to assist UNSCOM in inspection of Iraqi Weapons of Mass Destruction under UN Security Council Resolution 687. CBD also assists the Department of Trade and Industry in its role as the UK National Authority for the Chemical Weapons Convention, providing technical support over declarations, licensing, and inspections. CBD operates the Single Small Scale Facility that will be declared under the CWC.

2. **State the total funding for the program and its source.**

The research and development programme at CBD Porton Down is concerned with the provision of effective measures for the UK Armed Forces against the threat that chemical and biological weapons may be used against them. The annual cash budget for CBD Porton Down is about £44M of which the biological defence element is about £14M: this varies from year to year depending upon changes in the building and maintenance programme and the funds available from the Ministry of Defence. The thrust of the programme is to provide measures effective against as much of the CBW spectrum (see Figure 1) as possible. The programme is largely funded by the UK Ministry of Defence. A small amount (less than 10%) is carried out under contract for non-MOD organisations. The proportion of the budget concerned with biological defence is about 32%; this is made up of work specifically on defence against micro-organisms and toxins together with work on defence against the whole or part of the CBW spectrum (ie against both chemical and biological agents)

3. Are aspects of this program conducted under contract with industry, academic institutions, or in other non-defence facilities?

Yes.

4. If yes, what proportion of the total funds for the program is expended in these contracted or other facilities?

Extramural contracts with universities or industrial companies placed by CBD Porton Down total about £5M per annum for both chemical and biological defence. These involve 32 universities and other academic institutions, and 32 other bodies which are either government funded or industrial companies. About one third of the contracts are concerned with biological defence. The duration of individual contracts varies from a few months to three or four years with varying periods spent at CBD Porton Down. The precise institutions and companies are constantly varying as they are selected according to the needs of the defence programme and the availability of the necessary specialist skills.

5. Summarise the objectives and research areas of the program performed by contractors and in other facilities with the funds identified under para 4.

Contracts are let on specific research topics in support of the main research programme carried out at CBD Porton Down.

6. Provide a diagram of the organisational structure of the program and the reporting relationships (include individual facilities participating in the program).

In the Defence Evaluation and Research Agency (DERA) senior management structure, the Managing Director (MD) of Science has responsibility for CBD Porton Down. The Chief Executive of DERA reports to the Ministry of Defence (MOD) through the Chief Scientist (ChSc MoD) to the Chief Scientific Adviser (CSA) The objectives of the applied research programme are determined by the MOD with DDOR(Engr&NBC) as the customer focus. The Nuclear, Biological and Chemical (NBC) policy is determined by Director Defence Policy (D Def Pol) and NBC triservice equipment procurement is carried out by Project Manager Chemical Biological Defence and Pyrotechnicals (PM/CBD&P). CBD Porton Down provides technical and policy advice to each of these parts of the MOD; technical support to chemical and biological arms control is provided through the Proliferation and Arms Control Secretariat (PACS). The organisational structures of DERA and of CBD Porton Down are shown in figures 2 and 3.

7. Provide a declaration in accordance with Form A Part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to the national biological research and development program, within the territory of the reporting State, or under its jurisdiction or control anywhere.

The only UK facility which has a substantial proportion of its resources devoted to the national biological defence research and development programme is CBD, Porton Down for which a declaration is made on Form A Part 2(iii).

Form A Part 2 (iii)

NATIONAL BIOLOGICAL DEFENCE RESEARCH AND DEVELOPMENT PROGRAM

III. Facilities

Complete on form for each facility declared in accordance with paragraph 7 in Form A Part 2 (ii).

In shared facilities, provide the following information for the biological defence research and development portion only.

1. **What is the name of the facility?**

   Chemical and Biological Defence, Porton Down.

2. **Where is it located (include both address and geographical location).**

   CBD Porton Down
   Salisbury
   Wiltshire
   SP4 0JQ

The geographical location is shown in the attached map (Figure 4). G13 Access Road, centre of south boundary, Latitude 50° 07-N, Longitude 01° 40-W.

3. **Floor area of laboratory areas by containment level:**

   BL2 590 sq m)
) Biological defence research and development
   BL3 534 sq m) element
)
   BL4 0 sq m)

   Total laboratory floor area 2991 sq m.

4. **The organisational structure of each facility:**

   The organisational structure for CBD Porton Down is shown in Figure 3. The programme is concerned with effective protective measures against the CBW spectrum. The total number of staff at CBD Porton Down on 31 December 1996 was 561 civilians and 10 military, two of which are attached. The staff fall into the following categories:

Scientific, professional and technical staff (includes graduate scientists)	371
Experimental workers and similar grades (technicians)	102
Administration and support staff	88
TOTAL	561
Military personnel	8
Military personnel (attached duty)	2

For the biological defence research and development element, the numbers are as follows:

I. **Total number of personnel** 180

II. **Division of personnel**

Civilian	177
Military	3

III. **Division of civilian personnel by category:**

Scientists and Engineers	116
Technicians	33
Admin and support staff	28

IV. **List the scientific disciplines represented in the scientific/engineering staff.**

Chemistry, physics, bacteriology, virology, genetics, immunology, medicine, veterinary medicine, biochemistry, physiology, pharmacology, neuropharmacology, electron microscopy, engineering, operational analysis, computing.

V. **Are contractor staff working in the facility? If so, provide an approximate number.**

A small number of contractors work on the programme from time to time, on average 10 scientists at any one time. Other contractor staff carry out building and maintenance work and some administrative functions at CBD Porton Down.

VI. **What is (are) the source(s) of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by the Ministry of Defence?**

CBD Porton Down is a sector of the Defence Evaluation and Research Agency of the MOD. Some work is carried out on a repayment basis for non MOD customers.

VII. **What are the funding levels for the following programme areas:**

Research	£13M
Development	£1M
Test and Evaluation	This is carried out as required to support research and development. Not separately funded in UK.

VIII. **Briefly describe the publication policy of the facility:**

Staff at CBD Porton Down are encouraged to publish their work in the scientific literature.

IX. **Provide a list of publicly available papers and reports resulting from the work during the previous 12 months. (To include authors, titles and full references).**

Attached as Annex.

5. **Briefly describe the biological defence work carried out at the facility, including type(s) of micro-organisms and/or toxins studied, as well as outdoor studies of biological aerosols.**

The work of CBD Porton Down has been reported under Question 1 of Form A Part 2 (ii). Projects currently underway include:

a. The assessment of the hazard to UK Armed Forces from micro-organisms and toxins used by an aggressor as a BW.

b. Research into systems to facilitate collection, detection, warning, identification of BW agents. This work includes the evaluation of collection and detection systems in outdoor studies using microbiological simulants.

c. Rapid identification of micro-organisms by the use of monoclonal antibodies and gene probes. Organisms being studied include *Bacillus anthracis, Francisella tularensis, Yersinia pestis* and flaviviruses.

d. Studies on the mechanism of action and treatment of toxins.

e. The chemotherapy of bacterial and virus infections.

f. Studies on the mechanisms of pathogenicity of viruses and bacteria and the development of improved vaccines against plague, anthrax and flaviviruses and VEE, including the use of vaccine vectors such as Vaccinia virus, salmonella, lactococcus, mycobacterium and adenovirus to deliver vaccine antigens.

ANNEX TO
Form A Part 2 (iii)

BIOLOGICAL DEFENCE RESEARCH PUBLICATIONS FOR THE PROTECTION AND LIFE SCIENCES DIVISION, PORTON DOWN 1995

1. Alpar, H.O., J.C. Bowen, J. Eyles, and B.R. Conway. 1997. Potential of particulate carriers for the mucosal delivery of DNA vaccines. *Bio. Soc. Trans.* 25:337S.

2. Bullifent, H. L., A. Moir, M. M. Awad, P. T. Scott, J. I. Rood, and R. W. Titball. 1996. The level of expression of alpha-toxin by different strains of Clostridium perfringens is dependent on differences in promoter structure and genetic background. *Anaerobe.* 2:365-371.

3. Brooks, T.J.G and R.J. Phillpots. 1996 Interferon-α protects mice against lethal infection with St Louis encephalitis virus delivered by the aerosol and sub-cutaneous routes. International Congress of Virology, Jerusalem, Isreal.

4. Dando, M, R, and T Phillips. 1996. Preventing biological warfare. *Biologist.* 43(4): 158-161

5. Easterbrook, T.J., K.M. Reddin, S.M.Eley, V. Mobsby, and E.D. Williamson. 1996. Development of a liposomal acellular plague vaccine. Proceedings of LIPOSOME advances: progress in drug and vaccine delivery, London School of Pharmacy.

6. Griffiths, G.D., P.Rice, A.C.Allenby, S.C.Bailey, E.D. Williamson and D.G.Upshall. 1996. The inhalation toxicology of the castor bean toxin, ricin, and protection by vaccination. *J. Def. Sci., 1*, 227 - 235.

7. Lescott,T., A.M.Bennett, J.M.Broome, and R.J Phillpots. 1996. Comparison of virus dissemination and the immune responnses using three vaccinia virus strains. Proceedings of the Xth International Congress of Virology, Jerusalem, Isreal.

8. Phillpotts, R. J., T. J. G. Brooks, and C. S. Cox. 1997. A simple device for the exposure of animals to infectious microorganisms by the airborne route. *Epidemiol. Infect.* 118:71-75.

9 . Phillpotts, R. J., K. Venugopal, and T. Brooks. 1996. Immunisation with DNA polynucleotides protects mice against lethal challenge with St. Louis encephalitis virus. *Arch. Virol.* 141:743-749.

10. Russell, P., S. M. Eley, D. L. Bell, R. J. Manchee, and R. W. Titball. 1996. Doxycycline or ciprofloxacin prophylaxis and therapy against experimental Yersinia pestis infection in mice. *J. Antimicrob. Chemother.* 37:769-774.

11. Ulaeto, D., D. Grosenbach, and D. E. Hruby. 1996. The vaccinia virus 4c and A-type inclusion proteins are specific markers for the intracellular mature virus particle. *J. Virol.* 70:3372-3377.

12. WalkerJ.R., A.P.Phillips, and L.Millar. 1996.Verification of the Biological and Toxin Weapons Convention and the UK's Practice Compliance Inspection programme. Final report. In J.B.Poole and R Guthrie (Eds). *Verification 1996: Arms Control, Peacekeeping and the Environment.* London: VERTIC.

CBW THREAT SPECTRUM

Mustard Nerve Agent Cyanide	Toxic Industrial Pharmaceutical Agricultural Aerosols	Peptides	Saxitoxin Mycotoxin Ricin	Modified/Tailored Bacteria Viruses	Bacteria Viruses Rickettsia
		< ——— Agent of Biological Origin ——— >			
< - Agents not found in nature - Designer Drug Modifications – >					
Classical CW	Emerging CW	Bioregulators	Toxins	Genetically Manipulated BW	Traditional BW

KEY POINTS

1 Potential CBW threat spectrum.

2 Enhanced feasibility and ease of production.

3 Toxicity increases from left to right.

Figure 1

DERA ORGANISATION

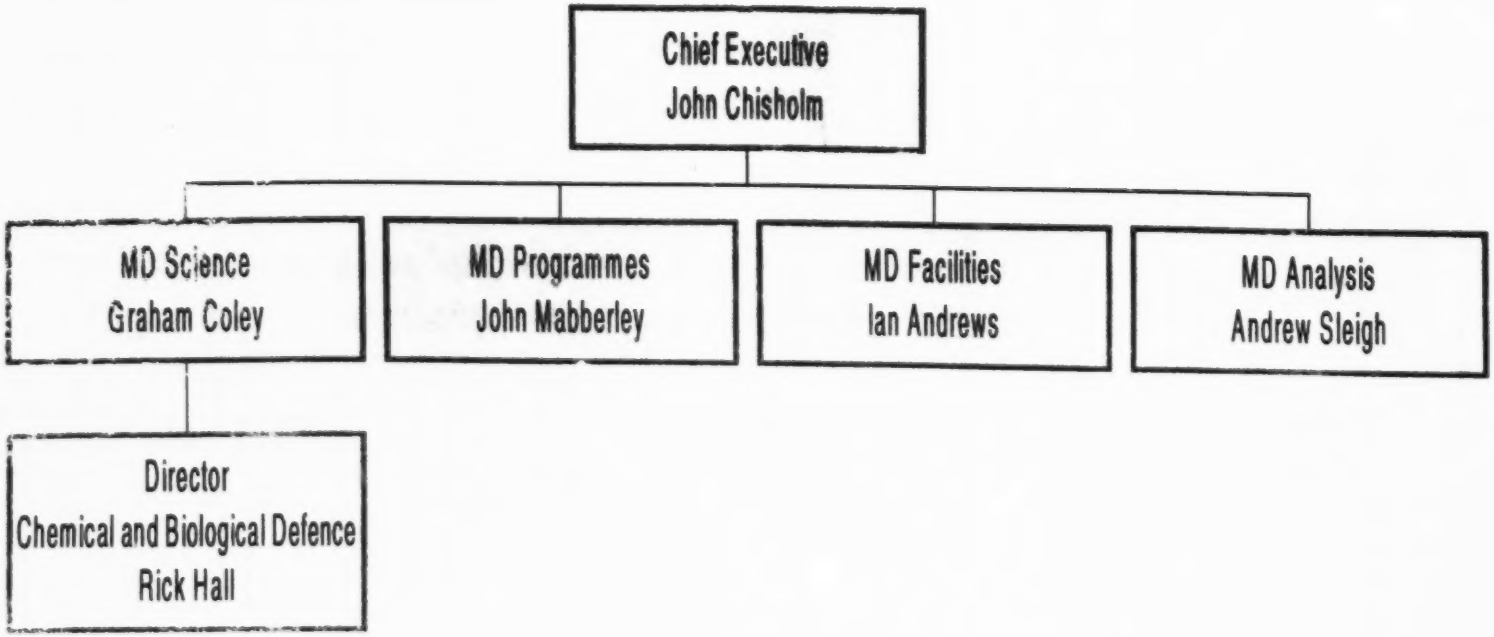

Figure 2

DERA

Chemical and Biological Defence

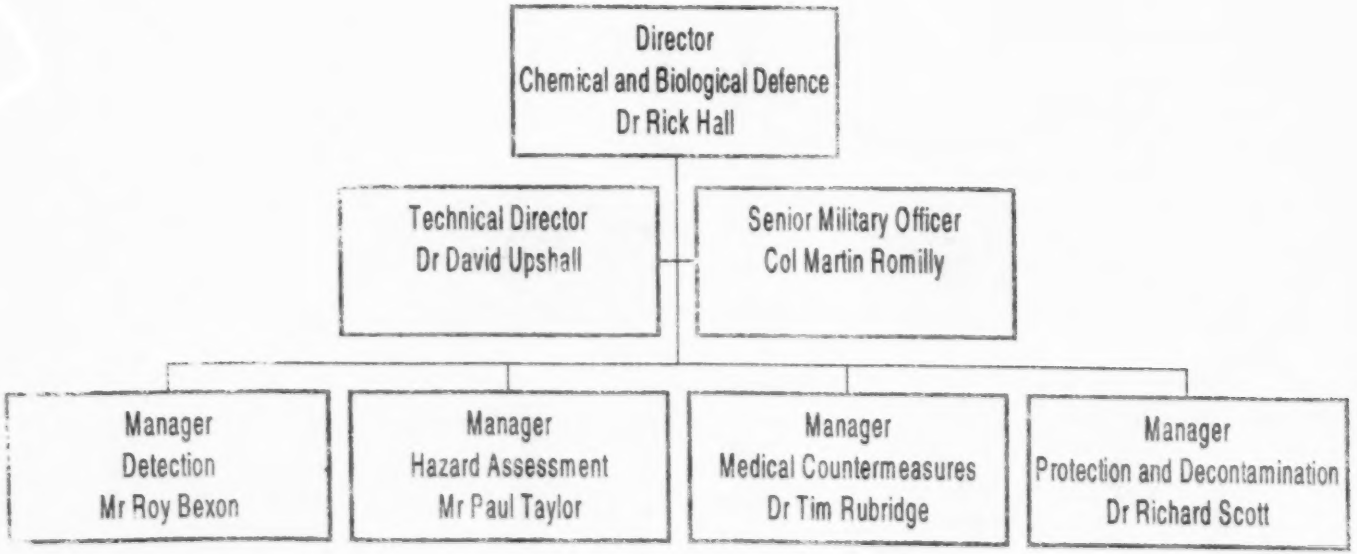

Figure 3

DERA

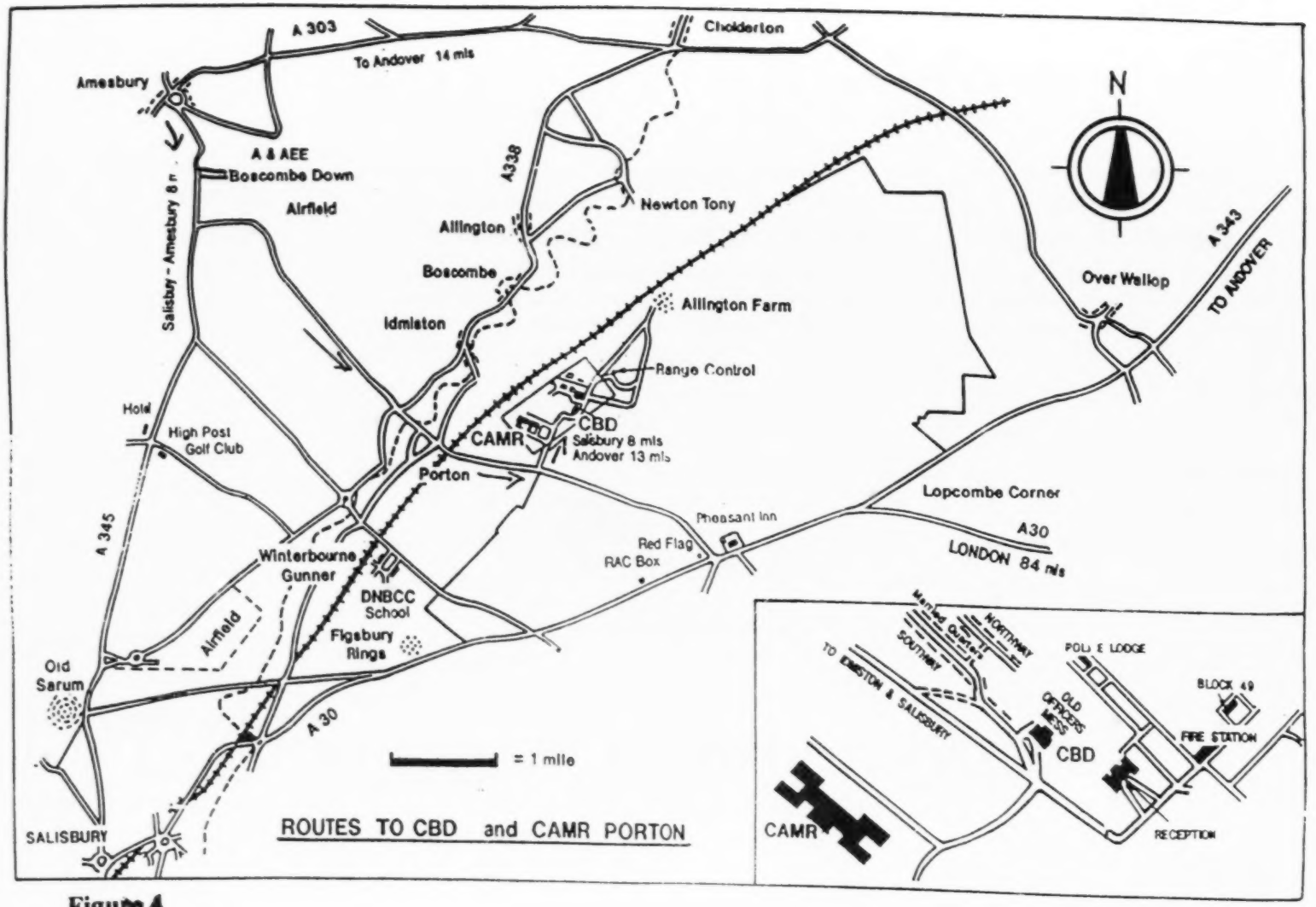
A 303
To Andover 14 mls
Amesbury
Cholderton
A & AEE
Boscombe Down
Airfield
Salisbury - Amesbury 8 m
A338
Newton Tony
Allington
Boscombe
Idmiston
Allington Farm
Range Control
Over Wallop
A 343
TO ANDOVER
N
Hold
High Post
Golf Club
CAMR
CBD
Salisbury 8 mls
Andover 13 mls
Porton
Lopcombe Corner
Pheasant Inn
A30
LONDON 84 mls
Red Flag
RAC Box
A 345
Winterbourne
Gunner
DNBCC
School
Figsbury
Rings
Airfield
Old
Sarum
A 30
= 1 mile
SALISBURY
ROUTES TO CBD and CAMR PORTON
Married Quarters
NORTHWAY
SOUTHWAY
TO EXMOUTH & SALISBURY
POLO LODGE
BLOCK 49
OLD
OFFICERS
MESS
CBD
FIRE STATION
CAMR
RECEPTION

Figure 4

Form B (i)

Background Information on Outbreaks of Notifiable Infectious Diseases

ANIMALS

	Number of cases per year						
	1990	1991	1992	1993	1994	1995	1996
African Horse Sickness	0	0	0	0	0	0	0
African Swine Fever	0	0	0	0	0	0	0
Anthrax	5	2	2	5	3	1	2
Aujeszky's Disease	0	0	0	0	0	0	15
Blue Eared Pig Disease	0	133	173	*	*	*	*
Blue Tongue	0	0	0	0	0	0	0
BSE	14103	22607	35160	36270	20599	13999	8006
Brucella Melitensis	0	0	0	0	0	0	0
Cattle Plague	0	0	0	0	0	0	0
Classical Swine Fever	0	0	0	0	0	0	0
Contagious Equine Metritis	1	0	0	0	0	0	0
Dourine	0	0	0	0	0	0	0
Enzootic Bovine Leukosis	0	2	0	25	9	7	5
Epizootic Lymphangitis	0	0	3	0	0	0	0
Equine Encephalomyelitis	0	0	0	0	0	0	0
Equine Infectious Anaemia	0	0	0	0	0	0	0
Foot and Mouth Disease	0	0	0	0	0	0	0
Fowl Pest	0	0	1	0	0	0	1
Glanders and Farcy	0	0	0	0	0	0	0
Goat Pox	0	0	0	0	0	0	0
Lumpy Skin Disease	0	0	0	0	0	0	0
Paramyxovirus	324	98	157	100	36	26	23
Peste Des Petits Ruminants	0	0	0	0	0	0	0
Pleuro-Pneumonia	0	0	0	0	0	0	0
Rabies	0	0	0	0	0	0	0
Rift Valley Fever	0	0	0	0	0	0	0
Scrapie	***	***	***	248	162	116	217
Sheep Pox	0	0	0	0	0	0	0
Sheep Scab	95	116	94	**	**	**	**
Swine Vesicular Disease	0	0	0	0	0	0	0
Teschen Disease	0	0	0	0	0	0	0
Tuberculosis (Cattle)	173	180	19	273	365	446	471
Tuberculosis (Deer)	5	2	1	1	1	2	8
Vesicular Stomatitis	0	0	0	0	0	0	0
Viral Haemorrhagic Disease	0	0	4	10	202	512	294
Warble Fly	1	0	2	110	103	0	0

* Blue Eared Pig Disease ceased to be a notifiable disease in Great Britain on 6.11.92.
** Sheep Scab ceased to be a notifiable disease in Great Britain on 1.7.92.
*** Scrapie became a notifiable disease in Great Britain on 1.1.93. Figure for 1996 is provisional.

PRINCIPAL OUTBREAKS OF NOTIFIABLE PLANT DISEASES IN THE UNITED KINGDOM IN 1996:

It has proved difficult to obtain an accurate return for notifiable (quarantine) diseases, but the following are the principal outbreaks. Please note that this is not a complete list):

Potato brown rot (Pseudomonas solanacearum) - Detected in one crop

Beet necrotic yellow-vein virus (beet rhizomania) - 25 crops

Strawberry black spot (Colletotrichum acuatatum) - Estimate 10-20 crops

ESTIMATES OF THE INCIDENCE OF MAIN PLANT DISEASES IN ENGLAND AND WALES, IN WINTER WHEAT, WINTER BARLEY, WINTER OILSEED RAPE AND POTATOES:

Winter wheat (based on samples from 368 randomly selected fields, June/July:

Erysiphe graminis f.sp.tritici (mildew) - 0.3% area of second leaf

Septoria tritici (leaf blotch) - 2.1% area of second leaf

Septoria nodorum (leaf blotch) - trace

Puccinia recondita (brown rust) - trace

Puccinia striiformis (yellow rust) - absent

Pseudocercosporella herpotrichoides (eyespot) - 4.8% stems (moderate and severe)

Rhizoctonia cerealis (sharp eyespot) - 2.5% stems (moderate & severe)

Gaeumannomyces graminis var tritici (take all) - 13% number of crops

Barley yellow dwarf virus - 8% number of crops (symptoms)

Fusarium foot and stem rot - 26.3% stems (slight & (moderate)

Winter barley (based on 387 randomly selected fields, June/July:

Pyrenophora teres (net blotch) - 80% number of crops; 3.4% area of second leaf

Rhynchosporium secalis (leaf blotch) - 80% number of crops; 2.1% area of second leaf

Erysiphe graminis f.sp.hordei (mildew) - 1.1% area of second leaf

Puccinia hordei (brown rust) - 12% number of crops; 0.1% area of second leaf

Puccinia striiformis (yellow rust) - trace

Septoria nodorum (leaf blotch) - trace

Pseudocercosporella herpotrichoides (eyespot) - 87% number of crops; 6.6% stems (moderate & severe)

Rhizoctonia cerealis (sharp eyespot) - 27% number of crops; 1.2% stems (moderate & severe)

Fusarium foot and stem rot - 87% number of crops; 21.2% stems (slight and moderate)

Winter oilseed rape (based on samples from 110 randomly selected fields, autumn, spring and summer:

	Incidence (% crop affected)			
	Leaves		Stems	Pods
	Autumn	Spring		
Peronospora parasitica (downy mildew)	95.5	74.5	0	20.9
Pyrenopeziza brassicae (light leaf spot)	0.9	43.6	47.3	24.5
Alternaria brassicae & A. brassicicola (dark leaf & pod spot)	22.7	0.9	2.7	20.9
Leptosphaeria maculans (canker)	80.9	84.5	76.4	0.9
Botrytis cinerea (grey mould)	0	0	12.7	20.9
Beet western yellows virus	19.1	43.6		
Cauliflower mosaic virus	9.1	0.9		
Turnip mosaic virus	3.6	2.7		

Potatoes, 1995 (based on samples from 80 randomly selected crops, summer and post harvest:

Erwinia carotovora (black leg) - 16.9 mean % crops affected

Verticillium albo-atrum (wilt) - 7.8 mean % crops affected

Phytophthora infestans (late blight) - absent on samples received

Rhizoctonia solani (stem canker) - 50.0 mean % crops affected
(stolon canker) - 76.3 mean % crops affected

Potato virus Y - 7.8 mean % crops afftected

Potato leaf roll virus - 14.3 mean % crops affected

Streptomyces scabies (common scab) - 91.3 mean % crops affected

Spongospora subterranea (powdery scab) - 10.0 mean % crops affected

Form B (i)

Background Information on Outbreaks of Notifiable Infectious Diseases

HUMANS

Disease	Number of cases per year						
	1990	1991	1992	1993	1994	1995	1996
Anthrax	3	1	1	2	0	1	0
Cholera	21	35	26	44	52	32	35
Typhoid	188	192	222	187	245	252	182
Paratyphoid	104	100	81	93	141	131	106
Dysentery	3061	11458	20698	7602	7563	5497	2638
Diphtheria	2	2	10	7	9	12	13
Plague	0	0	0	0	0	0	0
Smallpox	0	0	0	0	0	0	0
Tetanus	11	8	8	10	3	6	9
Typhus	4	8	12	3	5	4	3
Leptospirosis	25	26	33	25	27	15	16
Viral Haemorrhagic Fever	2	1	5	10	4	1	12

Appendix 1

VACCINE PRODUCTION FACILITIES

Name of facility: **Evans Medical Ltd**

Location:
Gaskill Road
Speke
Liverpool L24 9GR

General Description of the types of diseases covered:

Shick Test toxin and Shick Control
BCG vaccine
Measles
Fluvirin (inactivated influenza)
Poliomyelitis
Diphtheria
Rubella
Pertussis
Yellow Fever

Name of Facility: **Microbiological Research Authority Vaccine Production Unit**

Location:
Porton Down
Salisbury
Wiltshire SP4 0JG

General Description of the types of diseases covered:

Anthrax
Kvein skin test antigen
Botulinum Toxin
Botulinum Toxoid